Appendix G

Biological Resources

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Introduction

This special status species appendix was developed to present and analyze special status plant, wildlife, and aquatic species that could occur in the respective analysis areas for the Project:

- Special Status Plant Analysis Area;
- Special Status Wildlife Analysis Area; and
- Special Status Aquatic Resources Analysis Area.

These species were determined from lists of federal (USFWS, BLM, and USFS) and state sensitive species provided during initial Project consultation. Section 6.2 of the Environmental Impact Statement (EIS) provides a summary of agency participation and coordination for the Project. Subsequent to initially-approved species, a number of species have been added, removed, and updated, based on changes in state and federal listing status.

Appendix G is large-scale in nature and presents basic habitat associations, geographic ranges of each species, and occurrence potential within the respective special status analysis areas. This information was utilized to determine which special status species would be carried forward for analysis in the EIS in Section 3.6, Special Status Plant Species, Section 3.8, Special Status Wildlife Species, and Section 3.10, Special Status Aquatic Species. Information for each species was determined from a variety of sources, which are presented in the References column of the table.

Special Status Plant Species

Information regarding special status plant species and their habitats within the special status plant analysis area was obtained from a review of existing published sources, BLM RMPs, USFS LRMPs, BLM, USFS, USFWS, and NPS file information, as well as WYNDD, CNHP, UNHP, and NNHP database information. In addition, information obtained through correspondence with agency botanists and ecologists was incorporated, as appropriate. The potential for each species to occur within the analysis area was defined as follows:

- High: Documented occurrences and suitable habitat occur within the refined transmission corridor and areas of potential Project disturbance as described in Section 3.0;
- Moderate: Documented occurrences occur adjacent to the refined transmission corridors and potential habitat parameters identified within the refined transmission corridor and areas of potential Project disturbance;
- Low: There are no documented occurrences; however, one or more potential habitat parameters is identified within the refined transmission corridor and areas of potential Project disturbance; and
- None: There are no documented occurrences, nor potential habitat parameters identified within the refined transmission corridors or areas of potential Project disturbance.

In Section 3.6, Special Status Plant Species, federally listed, candidate, and proposed plant species are analyzed in detail. One species, the western prairie fringed orchid, is included because of the water depletion evaluation requirement in the Platte River Basin. The geographic range of the species is not within the special status plant species analysis area.

Special Status Wildlife Species

Information regarding special status wildlife species and their habitats within the special status wildlife analysis area was obtained from a review of existing published sources, BLM resource management

plans, USFS land and resource management plans (forest management plans), BLM, USFS, WGFD, CPW, UDWR, NDOW, and USFWS file information, as well as WYNDD, CNHP, UNHP, and NNHP database information. In addition, information obtained through correspondence with agency biologists was incorporated, as appropriate. State wildlife action plans include:

- Wyoming Game and Fish Department State Wildlife Action Plan (WGFD 2010);
- Colorado's Comprehensive Wildlife Conservation Strategy and Wildlife Action Plans (CDOW 2006);
- Utah Comprehensive Wildlife Conservation Strategy (Sutter et al. 2005); and
- Nevada Wildlife Action Plan (Wildlife Action Plan Team 2012).

Wildlife occurrence data provided by Wyoming, Colorado, Utah, and Nevada Natural Heritage Programs (year 2000 or more recent) was analyzed to determine the potential for each species to occur in the refined transmission line corridor. The potential for each species to occur within the refined transmission line corridor is defined as follows:

- High: The species' known geographic range includes the Project potential disturbance area; and
  - Suitable habitat for the species occurs within the Project refined transmission line corridor; or
  - Natural Heritage data points or other known occurrence data for the species exist within the Project refined transmission line corridor.
- Moderate: The species' known geographic range includes the Project potential disturbance area; and
  - Suitable habitat for the species occurs within the Project potential disturbance area; or
  - Natural Heritage data points or other known occurrence data for the species exist within the Project potential disturbance area.
- Low: The species' known geographic range includes the Project potential disturbance area but suitable habitat for the species is not known to occur within it.
- None: The species' known geographic range does not include the Project potential disturbance areas.

Information for each species was determined from a variety of sources, which are presented in the References column of the table. Species analyzed in this appendix were determined from a variety of agency lists. These lists include USFWS ESA species (USFWS 2014, 2010d); BLM sensitive species for Wyoming (BLM 2010), Colorado (BLM 2009), Utah (BLM 2011), and Nevada (BLM 2003); USFS sensitive species for the Ashley, Dixie, Fishlake, Manti-La Sal, and Uinta planning area of the Uinta/Wasatch/Cache National Forests (USFS 2013, 2003, 1986a-d,; Colorado state-listed species (CPW 2013); Utah state sensitive species (BLM 2011, and Nevada state-listed species (NNHP 2010). The State of Wyoming does not maintain a list of state-protected species, but defers to the BLM sensitive species list for Wyoming (BLM 2010). Species designated as Wyoming Species of Greatest Conservation Need were not included for analysis as they are afforded no statutory protection. Those wildlife species that are designated as both BLM Wyoming Sensitive and Wyoming Species of Greatest Conservation Need are identified as such in **Table G-2**. State wildlife management agency data (WGFD, CPW, UDWR, and NDOW) were also utilized to further determine habitat associations and occurrence potential for multiple species.

In Section 3.8, Special Status Wildlife Species, federally listed, candidate, and proposed wildlife species are analyzed in detail. Other special status species are described and analyzed in terms of their habitat associations, including nesting, breeding, foraging, wintering, and migration habitats. Habitat associations for each species are defined in terms of the twenty vegetation communities established for

the Project from SWReGAP and NWReGAP land cover descriptions. Developed/disturbed lands are also defined for the Project, but are not considered suitable wildlife habitat and are not considered in analysis. Three species, the whooping crane, interior least tern, and piping plover, are included because of the water depletion evaluation requirement in the Platte River Basin. The geographic ranges of these species are not within the special status wildlife species analysis area.

Special Status Aquatic Species

Information regarding special status aquatic species and their habitats within the special status aquatic species analysis area was obtained from a review of existing published sources, BLM RMPs, USFS Forest Management Plans, BLM, USFS, WGFD, CPW, UDWR, NDOW, and USFWS file information, as well as WYNDD, CNHP, UNHP, and NNHP database information. In addition, information as a result of correspondence with agency fishery biologists was incorporated into this section, as appropriate. The potential for each species to occur within the special status aquatic species analysis area was defined as follows:

- High: The species is known to occur within suitable habitat within Project corridors.
- Low to moderate: The species is known to occur within 2 miles of the Project corridors in a downstream direction from the boundary of a corridor.
- None: Project corridors do not occur within the geographic range of the species.

In Section 3.10, Special Status Aquatic Species federally listed and candidate aquatic species are analyzed in detail. One species, the pallid sturgeon, is included because of the water depletion evaluation requirement in the Platte River Basin. The geographic range of the species is not within the special status aquatic species analysis area. In addition, three species, the Colorado pikeminnow, humpback chub, and razorback sucker, are included because of the water depletion evaluation requirement in the Colorado River Basin. The geographic ranges of these species are not within the special status aquatic species analysis area.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
PLANTS						
Mussentuchit gilia	*Aliciella tenuis (Gilia tenuis)*	BLM-UT	Range: Endemic to Emery, Sevier, and Wayne Counties, Utah, along the western slope of the San Rafael Swell. Total population estimated at approx. 15,400 individuals. Habitat: Typically associated with communities composed of shadscale, *Ephedra, Wyethia,* Indian ricegrass, pinyon-juniper woodland and mountain mahogany on fine-textured, pale, poorly cemented limestone. Often on the Curtis Formation, as well as the Dakota and Navajo Sandstone. Elevation range 5,200 to 7,100 feet amsl. Flowering May to June.	Region II: Moderate. The species has been documented approx. 11 miles south of the refined transmission corridor in Sevier County; and approx. 14 miles southeast of the refined transmission corridor in Emery County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier and Emery counties, Utah.	Yes.	NatureServe 2012; UNPS 2006.
Chatterley onion	*Allium geyeri* var. *chatterleyi*	USFS-Manti-LaSal NF	Range: Endemic to San Juan County, Utah. Habitat: Pinyon-juniper, mountain mahogany, and ponderosa pine-manzanita communities. Elevation range 6,600 to 8,200 feet amsl. Flowering late June to early August.	None.	No. The species is endemic to San Juan County, Utah, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Jones' blue star	*Amsonia jonesii*	BLM-CO	Range: Known from the Four Corners states: Utah, New Mexico, Arizona, and Colorado (Mesa and Montezuma counties). No population estimates available. Habitat: Dry, open areas with clay, sandy, or gravelly soils in desert steppe, rocky gorges, and canyons. Elevation range 4,500 to 5,000 feet amsl. Flowering April.	Region II: High. The species has been documented within the refined transmission corridor and approx. 2 miles southeast of the refined transmission corridor in Mesa County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Sweet-flowered rock jasmine	*Androsace chamaejasme* ssp. *carinata*	USFS-Manti-LaSal NF	Range: This species is known in Alaska and western Canada south to New Mexico in Utah, Wyoming, and Colorado. In Utah, the species is found in the LaSal Mountains in Grand and San Juan counties, Utah. Habitat: Alpine tundra, montane rock crevices, rocky soils derived from limestone dolomite. The species may occur in clearings or beneath shrub cover in leaf litter. Elevation range 10,000 to 12,600 feet amsl. Flowering May to July.	None.	No. Although known populations are present approx. 30 miles south of the refined transmission corridor, the species occurs at a higher elevation than that crossed by the refined transmission corridor within Grand County, Utah. The project does not cross San Juan County, Utah. As such, it is unlikely the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006; Fertig et al. 1994; Graham and Ackerfield 2008.
Rough angelica	*Angelica scabrida*	BLM-NV	Range: Endemic to the Spring Mountains within Clark County, Nevada. Habitat: An aquatic or wetland-dependent species occupying moist rocky calcareous drainages, canyon bottoms, or seepy or north-facing slopes over carbonate or sandstone rock in the interior chaparral, mountain brush, and montane conifer forest zones. Elevation range 4,040 to 9,350 feet amsl. Flowering July to September.	None.	No. The species is endemic to the Spring Mountains which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001; NatureServe 2012.
Sticky ringstem	*Anulocaulis leiosolenus* var. *leiosolenus*	NPS-Lake Mead NRA; BLM-NV	Range: Known within Nevada, Arizona, northern Texas, and Mexico. Habitat: Found on calcareous clays and shales, sometimes on gypsum substrates. Elevation range 1,300 to 3,940 feet amsl. Flowering late spring-early fall.	Regions III and IV: The species has been documented within the refined transmission corridor in Clark County, Utah. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada. Based on agency consultation, this species is not likely to occur within the refined transmission corridor within the NPS-Lake Mead NRA.	Yes.	NPS 2012; NatureServe 2012; Southwest Environmental Information Network 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Atwood's columbine	*Aquilegia atwoodii*	BLM-UT	Range: Restricted in distribution to a couple of tributaries of the Green River in the Uintah County portion of Desolation Canyon including Rattlesnake Canyon within the Desolation Canyon Wilderness Study Area. Habitat: Habitat parameters are unknown.	None.	No. The species is restricted to the Desolation Canyon Wilderness Study Area which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2011.
Desolation Canyon columbine	*Aquilegia desolaticola*	BLM-UT	Range: Known within Desolation Canyon in Grand and Uintah counties, Utah. Habitat: Seeps and adjacent moist sandy soil in the Price River Formation along the Green River in canyons tributary to Desolation Canyon. Elevation range 4,265 to 4,430 feet amsl. Flowering period unknown.	None.	No. Based on the species limited elevation range and geological substrate, potential habitat is not present within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2011; NatureServe 2012.
Link Trail columbine	*Aquilegia flavescens* var. *rubicunda*	USFS-Manti-LaSal NF	Range: Endemic to the mountains of Emery, Garfield, and Sevier counties, Utah. Most of the documented occurrences are located within the Manti-La Sal National Forest; a few occurrences are located within the Fishlake National Forest. Habitat: Ponderosa pine, aspen, and spruce-fir communities, generally associated with seeps in Mesa Verde Group sandstones near coal measures. Associated species include river birch, Douglas fir, rose, serviceberry, willow, squawbush, and rock spirea. Elevation range 6,900 to 8,500 feet amsl. Flowering period unknown.	Region II: Moderate. The species has been documented approx. 7 miles northeast and approx. 6 miles southwest of the refined transmission corridor in Emery County; and approx. 6 miles north of the refined transmission corridor in Sevier County, Utah. Potential habitat for the species (including the presence of the Mesa Verde Group sandstone) may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah within the USFS-Manti-LaSal NF.	Yes.	UNPS 2006; NatureServe 2012
Graham columbine	*Aquilegia grahamii*	USFS-Ashley NF	Range: Endemic to the eastern Uinta Mountains, Uintah County, Utah. Habitat: Sandy drip lines in hanging gardens of shaded canyons of the Weber Sandstone Formation. Elevation range 7,600 feet amsl. Flowering June to July.	None.	No. The species is endemic to the Uinta Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Laramie columbine	*Aquilegia laramiensis*	BLM-WY	Range: Endemic to the Laramie Range of southeast Wyoming within Albany and Converse counties. Habitat: Relatively poor soils on sparsely vegetated outcrops of igneous and metamorphic rock and small, shaded ledges, large crevices, soil pockets among boulders, and the bases of outcrops. Elevation range 5,400-10,100 feet amsl. Flowering June to July.	None.	No. The species is endemic to Albany and Converse counties, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	WYNDD 2009.
Utah columbine	*Aquilegia scopulorum* var. *goodrichii*	BLM-UT	Range: Restricted to shale ridges of the West Tavaputs Plateau. Known from Avintaquin drainage east to Argyle drainage in southern Duchesne County, Utah. Habitat: Shale ridges within the Green River Formation. Species inhabits high elevation ranges. Flowering period unknown.	Region II: Moderate. The species has been documented adjacent to the refined transmission corridor within Duchesne County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah.	Yes.	BLM 2011.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Park rockcress	*Arabis fernaldiana* var. *fernaldiana (Arabis vivariensis)*	BLM-UT, BLM-CO	Range: Endemic to Uintah County, Utah and Moffat County, Colorado. In Utah, it is found in Dinosaur National Monument, on Diamond Mountain, and on Cliff Ridge and Blue Mountain. Habitat: Mixed desert shrub and pinyon-juniper woodland communities in limestone and sandstone outcrops within the Weber Formation often found in pine duff in shaded areas. Elevation range 5,000 to 6,000 feet amsl. Flowering April/May to early June.	Low.	No. Although the species has been documented approx. 7 miles north of the refined transmission corridor in Uintah County, Utah, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the species limited distribution geographic range and associated geological formation.	BLM 2010, 2008; Spackman and Anderson 2002; NatureServe 2012; UGS 2010; UNPS 2006.
Goodrich eared rockcress	*Arabis goodrichii*	BLM-UT	Range: Known within Millard County, Utah. Habitat: Mountain mahogany vegetation communities on talus slopes.	Region II: Low. No known populations have been identified for the species; limited data is available regarding habitat requirements. Although unlikely, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment throughout Millard County, Utah.	Yes.	BLM 2011.
Las Vegas bearpoppy	*Arctomecon californica*	NPS-Lake Mead NRA; NV State CE, BLM-NV	Range: Known within Clark County, Nevada and also in Arizona and Utah. Habitat: Open, dry, spongy or powdery, often dissected, “badland”, or hummocked soils with high gypsum content, often with well-developed soil crust, in areas of generally low relief on all aspects and slopes, with a sparse cover of other gypsum-tolerant species surrounded by *Larrea tridentata, Atriplex*, and *Coleogyne ramosissima*. Elevation range 1,060 to 3,642 feet amsl. Flowering April to May.	Regions III and IV: High. The species has been documented within, and adjacent to, the NPS-Lake Mead NRA and refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment throughout Clark County, Nevada.	Yes.	NNHP 2001; NPS 2012; USFWS 2010a.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Dwarf bearpoppy	*Arctomecon humilis*	FE (UT)	Range: Endemic to the eastern edge of the Mojave Desert near St. George, Utah in Washington County. This species occurs within the "Dixie Corridor", where the Mohave Desert floristic province meets the Colorado Plateau physiographic province. Habitat: Low, rolling hills and ridgetops composed of gypsiferous clay soils of the Triassic Moenkopi Formation in warm, open desert shrub communities. It is found predominantly on the Shnabkaib, and Middle and Upper Red members of the Moenkopi Formation. Elevation range 2,700 to 3,300 feet amsl. Flowering March to May.	Low.	No. Although the species has been documented approx. 12 miles southeast of the refined transmission corridor in Washington County, suitable habitat parameters (specifically elevation range and geological formation) are not present within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006; USFWS 2012a, 2010a, 1985a.
White bearpoppy	*Arctomecon merriamii*	BLM-NV	Range: Known within Clark, Lincoln, and Nye counties, Nevada and also in California. Habitat: On a wide variety of dry to sometimes moist basic soils, including alkaline clay and sand, gypsum, calcareous alluvial gravels, and carbonate rock outcrops. Elevation range 2,000 to 6,280 feet amsl. Flowering spring.	Regions III: Moderate. The species has been documented adjacent to the refined transmission corridor in Lincoln County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada. Region IV: Moderate. The species has been documented approx. 23 miles west of the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NNHP 2001; NatureServe 2012.
Petiolate wormwood	*Artemisia campestris ssp. borealis var. petiolata*	USFS-Ashley NF	Range: Known only from the Uinta Mountains in Duchesne County, Utah. Habitat: Ponderosa pine-lodgepole pine-*Arcotostaphylos* community. Elevation range: 8,900 feet amsl. Flowering July to August.	None.	No. The species is endemic to the Uinta Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Eastwood milkweed	*Asclepias eastwoodiana*	BLM-NV	Range: Known within Esmeralda, Lander, Lincoln, and Nye counties, Nevada. Habitat: In open areas on a wide variety of basic (pH usually 8 or higher) soils, including calcareous clay knolls, sand, carbonate or basaltic gravels, or shale outcrops, generally barren and lacking competition, frequently in small washes or other moisture-accumulating microsites, in the shadscale, mixed-shrub, sagebrush, and lower pinyon-juniper woodland zones. Elevation range 4,680 to 7,080 feet amsl. Flowering May to June.	Region III: Moderate. The species has been documented approx. 13 miles north of the refined transmission corridor in Lincoln County, Nevada. Based on elevation range and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NNHP 2001.
Barneby woody aster	*Aster kingii* var. *barnebyana*	USFS – Fishlake NF; USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the Canyon Mountains in Juab and Millard counties, Utah. Habitat: Mountain mahogany-oak communities on shaded, low outcrops of Precambrian quartzite. Known within precipitous, somewhat protected locations. Elevation range 6,000 to 9,460 feet amsl. Flowering August to September.	Low.	No. Although the species has been documented approx. 3.5 miles west of the refined transmission corridor in Millard County, Utah; and approx. 5 miles north of the refined transmission corridor in Juab County, Utah, habitat model results indicate lack of potential habitat within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Millard and Juab counties, Utah.	UNPS 2006; NatureServe 2012.
Shivwitz milkvetch	*Astragalus ampullarioides*	FE (UT)	Range: Endemic to the Mojave Desert and the vicinity of St. George, Utah within Washington County. Six populations are located in the vicinity of St. George, Utah. Habitat: Warm desert shrub, creosote bush, and juniper communities on purple-hued patches of soft clay typically associated with Petrified Forest member of the Chinle Formation. Elevation range 3,018 and 4,363 feet amsl. Flowering May to June.	Region III: Moderate. The species has been documented approx. 5 miles southeast of the refined transmission corridor in Washington County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Washington County, Utah.	Yes.	UNPS 2006; USFWS 2012a, 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Gumbo milkvetch	*Astragalus ampullarius*	BLM-UT	Range: Restricted to Kane and Washington counties, Utah, and Mohave and Coconino counties, Arizona. Habitat: Restricted habitat of clay, saline, seleniferous soils of the Chinle and Moenkopi formations. Typically found in mixed desert shrub and juniper communities. Elevation range 3,200 to 5,400 feet amsl. Flowering April to May.	Low.	No. Based on the presence of suitable geological formations and elevation range, potential habitat may be present within Washington County, Utah; however, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Dana milkvetch	*Astragalus argophyllus* var. *stocksii (Astragalus henrimontanensis)*	USFS-Dixie NF	Range: Endemic to the Henry Mountains and Aquarious Plateau in Garfield and San Juan counties, Utah. Habitat: Mixed conifer, aspen, ponderosa pine, pinyon-juniper woodland, and sagebrush communities on gravelly loam soil. Elevation range 7,200 to 9,200 feet amsl. Flowering April to May.	None.	No. The species is endemic to Garfield and San Juan counties, Utah, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006; NatureServe 2012.
Torrey milkvetch	*Astragalus calycosus* var. *monophyllidius*	BLM-NV	Range: Known within Clark, Elko, Eureka, Lincoln, and Nye counties, Nevada; and also in Utah in the following watersheds: White, Muddy, Meadow Valley Wash, Pilot-Thousand Springs, Diamond-Monitor Valleys, Ralston-Stone Cabin Valleys, and Hot Creek Railroad Valleys. Habitat: Elevation range 5,350 to 7,465 feet amsl.	Region III: Moderate. The species has been documented approx. 5 miles west and approx. 7 miles south of the refined transmission corridor in Lincoln County, Nevada. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NNHP 2001; NatureServe 2012.
Bicknell milkvetch	*Astragalus consobrinus*	USFS-Fishlake NF	Range: Restricted to central and south-central Utah in Emery, Garfield, Sevier, and Wayne counties. Habitat: Sagebrush-grassland, desert shrub, and pinyon-juniper woodland communities on the Mancos Shale Formation, volcanic gravel, open gravelly, or sandy knolls, and barren stony hillsides. Elevation range 6,000 and 8,500 feet amsl. Flowering May to July.	Region II: Moderate. The species has been documented approx. 3 miles south of the refined transmission corridor in Emery County, Utah, and 11 miles south of the refined transmission corridor within the USFS-Fishlake NF in Sevier County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah within the USFS-Fishlake NF.	Yes.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Debeque milkvetch	*Astragalus debequaeus*	BLM-CO	Range: Endemic to the Colorado River Valley near Debeque within Garfield and Mesa counties, Colorado. Total estimated population is 61,256 individuals from 17 documented occurrences. Habitat: Barren outcrops of dark clay interspersed with layers of sandstone on varicolored, fine textured, seleniferous, saline soils of the Wasatch Formation-Atwell Gulch Member. Elevation range 5,100 to 6,400 feet amsl. Flowering late April to May.	Region II: Low. The species has been documented approx. 35 miles east of the refined transmission corridor in Garfield and Mesa counties, Colorado. Based on the lack of suitable habitat parameters, it is unlikely the species would be present within the refined transmission corridor; however, suitable habitat may be present within the analysis area and within 1 mile of the alignment in Mesa County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Deseret milkvetch	*Astragalus desereticus*	FT (UT)	Range: Endemic to central Utah. Known from one population of 5,000 to 10,000 individuals found near the Town of Birdseye, Utah. Habitat: Open to sparse juniper-sagebrush community on open, steep, naturally disturbed south and west (rarely north) facing slopes of sandy-gravelly soils of the Moroni Formation dominated by pinyon pine and Utah juniper. Elevation range 5,400 to 5,700 feet amsl. Flowering May and June.	Region II: High. The species has been documented within and adjacent to the refined transmission corridor in Utah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Utah County, Utah.	Yes.	USFWS 2012a, 2011a; UDWR 2012.
Horseshoe milkvetch	*Astragalus desperatus* var. *neeseae (Astragalus equisolensis*)	BLM-UT	Range: Restricted to Uintah County, Utah and Mesa County, Colorado. In Uintah County, the species is found in scatter locations in the vicinity of Horseshoe Bend along the Green River. Habitat: Sagebrush, shadscale, horsebrush, and other mixed desert and salt desert shrub communities on sand-silty soils, river terrace sands and gravels, and ground level crevices of rock outcrops within the Duchesne River Formation. Elevation range 4,800 to 5,200 feet amsl. Flowering May to early June.	Region II: High. The species has been documented within and approx. 0.5 mile south of the refined transmission corridor in Uintah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah County, Utah.	Yes.	BLM 2010; USFWS No Date; UNPS 2005, 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Debris milkvetch	*Astragalus detritalis*	BLM-CO	Range: Endemic to the Uinta Basin in Duchesne and Uintah counties, Utah, and Rio Blanco and Moffat counties, Colorado. Habitat: Found in pinyon-juniper woodland and mixed desert shrub communities associated with *Artemisia, Stipa, Phlox, Trifolium*, and cactus species. Often in rocky soils ranging from sandy clays to sandy loams, and on alluvial terraces with cobbles. Elevation range 5,400 to 7,200 feet amsl. Flowering late April to early June.	Regions I and II: High. The species has been documented within the refined transmission corridor in Moffat and Rio Blanco counties, Colorado; and Uintah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Rio Blanco and Moffat counties, Colorado; and Uintah County, Utah.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Meadow milkvetch	*Astragalus diversifolius*	BLM-WY	Range: Known from central Idaho to northern Utah. In Wyoming, this species is known within the Great Divide Basin. Habitat: Moist, often alkaline meadows and swales in sagebrush valleys. Elevation range 4,400 to 6,620 feet amsl.	Region I: Moderate. The species has been documented approx. 9 miles northwest of the Separation Flat Ground Electrode Site and approx. 19 miles north of the refined transmission corridor in Sweetwater County, Wyoming. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment within Sweetwater County, Wyoming.	Yes.	NatureServe 2012; WYNDD 2009.
Duchesne milkvetch	*Astragalus duchesnensis*	BLM-CO	Range: Endemic to the Uinta Basin, this species occurs in Duchesne and Uintah counties, Utah and in Moffat and Rio Blanco counties, Colorado. Habitat: Found in salt desert shrub and pinyon-juniper woodland communities on sandy and gravelly pediments such as sandy mesas or around sandstone or shale outcrops. Elevation range 4,690 to 6,400 feet amsl. Flowering late July to June.	Region I: Moderate. The species has been documented approx. 6 miles south of the refined transmission corridor in Rio Blanco County. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado. Region II: High. The species has been documented within the refined transmission corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Rio Blanco and Moffat counties, Colorado.	Yes.	BLM 2010; Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Veyo milkvetch	*Astragalus ensiformis* var. *gracilior*	BLM-NV	Range: Known within Lincoln County, Nevada; and also in Washington County, Utah. Habitat: Open washes, valley floors, and hillsides in clay soils within pinyon-juniper woodland and sagebrush communities. Elevation range 4,200 to 5,000 feet amsl. Flowering period unknown.	Region III: High. The species has been documented within the refined transmission corridor in Lincoln County, Nevada. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012.
Needle Mountains milkvetch	*Astragalus eurylobus*	BLM-NV	Range: Known within Lincoln and Nye counties, Nevada and also in Arizona and Utah. Habitat: Generally deep, barren, sandy, gravelly, or clay soils derived from sandstone or siliceous volcanics, frequently in or along drainages. Elevation range 4,600 to 5,750 feet amsl. Flowering late spring.	Region III: High. The species has been documented within the refined transmission corridor in Lincoln County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Black woollypod	*Astragalus funereus*	BLM-NV	Range: Known within Clark, Lincoln, and Nye counties, Nevada. Habitat: Dry, open scree, talus, or gravelly alluvium derived from light-colored volcanic tuff, on east, south, less commonly west, and rarely north aspects. Elevation range 3,200 to 7,680 feet amsl. Flowering period unknown.	Region III: Low. Based on elevation range and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Threecorner milkvetch	*Astragalus geyeri* var. *triquetrus*	NPS-Lake Mead NRA; NV State CE, BLM-NV	Range: Known within Clark and Lincoln counties, Nevada and also in Arizona. Habitat: Dependent on sand dunes or deep sand in Nevada, this species occupies open, deep sandy soil, generally stabilized by vegetation and/or a gravel veneer. Elevation range 1,100 to 2,400 feet amsl. Flowering late winter to early spring.	Regions III and IV: High. The species has been documented within the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada. Based on agency consultation and habitat parameters, this species is not likely to occur within the refined transmission corridor within the NPS-Lake Mead NRA.	Yes.	NNHP 2001; NPS 2012: USFWS 2010a.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Gilman milkvetch	*Astragalus gilmanii*	BLM-NV	Range: Known within Lincoln County, Nevada and also in California. Habitat: On light-colored volcanic tuff slopes in pinyon-juniper woodland communities. Elevation range 5,380 to 6,000 feet amsl. Flowering May.	Region III: Low. Based on elevation range and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Hamilton milkvetch	*Astragalus hamiltonii*	BLM-UT	Range: Largely confined to the Duchesne River Formation between the towns of Tridell, Lapoint, and Vernal, in Uintah County, Utah. Habitat: Found on benches and steep slopes of red, erosive, sandy clay loam soils of the Duchesne River Formation in juniper and desert shrub communities. Elevation range 4,900 to 6,200 feet amsl. Flowering period May to June.	Region II: High. The species has been documented within the refined transmission corridor in Uintah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah County, Utah.	Yes.	BLM 2011, 2010, 2008; USFWS 2012a, 2011b; UNPS 2006.
Holmgren milkvetch	*Astragalus holmgreniorum*	FE (UT)	Range: Typically found in areas that drain to the Santa Clara and Virgin rivers. Six documented populations are located within ten miles of St. George, Utah in Washington County, Utah. Habitat: Skirt edges of small and large hill and plateau formations worn by water erosion, slightly above or at the edge of intermittent drainages. Most often the species is found on Virgin River limestone cobble and Upper Red members of the Moenkopi Formation in warm desert shrub communities on gravelly clay hills. Elevation range 2,700 to 3,000 feet amsl. Flowering April to May.	None.	No. The species occurs at a lower elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within the species-specific geologic formations in Washington County, Utah.	NatureServe 2012; UNPS 2006; USFWS 2012a, 2006.
Iselyi's milkvetch	*Astragalus iselyi*	BLM-UT	Range: Extremely narrow endemic to Grand and San Juan counties, Utah known from three general areas astride the Grand-San Juan county line and a single disjunct location in Grand County. Habitat: Seleniferous and gypsiferous soils derived from the Morrison and Paradox formations in pinyon-juniper woodland communities. Elevation range 5,000 to 6,595 feet amsl. Flowering late-March to May.	None.	No. The species is found on specific geologic formations that are not crossed by the areas of Project disturbance, analysis area, and within 1 mile of the alignment within Grand County, Utah.	NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Straw milkvetch	*Astragalus lentiginosus* var. *stramineus*	BLM-NV	Range: Locally restricted within the Upper Virgin and Lower Virgin watersheds in Clark and Lincoln counties, Nevada; and Washington County, Utah. Habitat: Sandy and gravelly flats and dunes. Elevation range 2,000 to 3,000 feet amsl. Flowering period unknown.	Regions III and IV: Moderate. The species has been documented approx. 3 miles east of the refined transmission corridor in Lincoln County, Nevada. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln and Clark counties, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Navajo Lake milkvetch	*Astragalus limnocharis var. limnocharis*	USFS-Dixie NF	Range: Endemic to southwestern Utah in Iron and Kane counties. Habitat: Lake shores and limestone breaks on Pink and White Limestone members of the Claron Formation, on shore of Navajo Lake or with western bristlecone pine communities. Elevation range 8,800 and 10,000 feet amsl. Flowering July to September.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment in Iron and Kane counties, Utah.	UNPS 2006.
Heliotrope milkvetch/ Table Cliff milkvetch	*Astragalus limnocharis var. montii (Astragalus montii/ Astragalus limnocharis var. tabulaeus)*	FT (UT), USFS-Dixie NF	Range: Endemic to the southern Wasatch Plateau on Ferron, Heliotrope, and White mountains in Sanpete and Sevier counties, Utah. Habitat: High elevation, subalpine mixed grass-forb plant communities at timberline with shallow and poorly developed soils found in shallow, very rocky soils derived from the Flagstaff Geological Formation (limestone). Elevation range 10,500 to 11,000 feet amsl. Flowering mid June to August.	Low.	No. Although potential habitat may be present based on the limited presence of suitable elevation range, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species narrow and limited geographic range.	CPC 2010; NatureServe 2012; USFWS 2012a, 1995a; UNPS 2006.
Grand Junction milkvetch	*Astragalus linifolius*	BLM-CO	Range: Endemic to the eastern base of the Uncompahgre Plateau in Delta, Mesa, and Montrose, counties Colorado. Total population estimated at approx. 10,000 individuals between 21 known occurrences; however, population estimates have not been provided for all occurrences. Habitat: Pinyon-juniper and sagebrush communities on dry adobe hills and sandstone areas on the Chinle and Morrison formations. Elevation range 4,800 to 6,200 feet amsl. Flowering late May to June.	None.	No. The species is endemic to the Chinle and Morrison formations, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa County, Colorado.	Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Loa milkvetch	*Astragalus loanus*	BLM-UT	Range: Endemic to central Sevier County, Utah. Habitat: Sagebrush and juniper communities on igneous gravels. Elevation range 6,300 to 6,800 feet amsl. Flowering May to early June.	Region II: Moderate. The species has been documented approx. 1 mile south of the refined transmission corridor in Sevier County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah.	Yes.	NatureServe 2012; UNPS 2006.
Halfring milkvetch	*Astragalus mohavensis* var. *hemigyrus*	BLM-NV	Range: Known within Clark, Lincoln, and Nye counties, Nevada and also in California. Habitat: Carbonate gravels and derivative soils on terraced hills and ledges, open slopes, and along washes in the creosote-bursage, blackbrush, and mixed-shrub zones. Elevation range 3,000 to 5,600 feet amsl. Flowering April to June.	Regions III and IV: Low. Although the species has not been documented within or adjacent to the refined transmission corridor, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark and Lincoln counties, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Mokiak milkvetch	*Astragalus mokiacensis*	NPS-Lake Mead NRA; BLM-NV	Range: Known with Clark County, Nevada and also in Arizona and Utah. Habitat: Bluffs, cliff terraces, gullied badlands, disturbed areas along streams on sandy soils. Elevation range 2,460 to 5,020 feet amsl. Flowering April to June	Regions III and IV: Low. Based on elevation range, suitable vegetation cover types, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada. Based on agency consultation and habitat parameters, this species is not likely to occur within the refined transmission corridor within the NPS-Lake Mead NRA.	Yes.	NatureServe 2012; NPS 2012; NNHP 2001.
Ferron milkvetch	*Astragalus musiniensis*	BLM-CO	Range: Known within Mesa and Garfield counties, Colorado; and also in Utah. Habitat: Gullied bluffs, knolls, benches, and open hillsides in pinyon-juniper woodlands, sagebrush, or desert shrub communities, mostly on shale, sandstone, or alluvium derived from them. Elevation range 4,700 to 7,000 feet amsl. Flowering late April through early June.	Region II: High. The species has been documented within the refined transmission corridor in Garfield and Mesa counties, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Garfield and Mesa counties, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Naturita milkvetch	*Astragalus naturitensis*	BLM-CO	Range: Known within Garfield, Mesa, Montezuma, Montrose and San Miguel counties, Colorado; and also in New Mexico, Utah, and the Navajo Nation. Habitat: Cracks and ledges of sandstone cliffs and flat bedrock area with some shallow soil development, within pinyon-juniper woodland communities. Elevation range 4,310 to 6,725 feet amsl. Flowering April to May.	Region II: Low. The species has been documented approx. 37 miles east of the refined transmission corridor in Mesa County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Garfield County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Nelson's milkvetch	*Astragalus nelsonianus*	BLM-CO	Range: Regional endemic of southwest and central Wyoming, northeast Utah, and northwest Colorado. One, possibly extirpated population has been documented in Moffat County, Colorado. Habitat: Barren, alkaline flats, gullied bluffs, and bottomlands. Elevation range 6,400 to 7,000 feet amsl. Flowering period late May to August.	Region I: Moderate. The species has been documented approx. 2 miles northwest of the refined transmission corridor in Moffat County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Pink egg milkvetch (Long-calyx eggvetch)	*Astragalus oophorus* var. *lonchocalyx*	BLM-UT	Range: Endemic to the Great Basin within Beaver, Iron, and Washington counties, Utah; and in Lincoln County, Nevada. Habitat: Pinyon-juniper, sagebrush, and mixed desert shrub communities. Elevation range 5,800 to 7,500 feet amsl. Flowering May.	Region III: High. The species has been documented within the refined transmission corridor in Iron County, Utah; and adjacent to the refined transmission corridor in Iron, Washington, and Beaver counties, Utah; and Lincoln County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Iron County, Utah and Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001; UNPS 2006.
Ash Meadow milkvetch	*Astragalus phoenix*	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Dry, hard, seasonally moist, white barren flats, washes, and knolls of calcareous alkaline soils with saltgrass, shadscale saltbush, Ash Meadows blazingstar, alkali goldenbush, and nakedstem sunray. Elevation range 2,200 to 2,350 feet amsl. Flowering period: spring.	None.	No. The species is endemic to the Ash Meadows, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Fisher Tower's milkvetch	*Astragalus piscator*	BLM-CO	Range: Known only from locations in close proximity to the Colorado River in Grand, San Juan, and Wayne counties, Utah and from the canyon of the Dolores River in Mesa County, Colorado. Habitat: Alluvial terraces (benches) along the Dolores River, in open areas with sandy, sometimes gypsiferous soils of valley benches and gullied foothills; also in disturbed sandy habitats along the road. Elevation range 4,300 to 5,600 feet amsl. Flowering late April to early June.	Low.	No. Although potential habitat may be present based on the presence of suitable elevation range, vegetation cover types, and soil substrate, it is unlikely this species would occur within the refined transmission corridor given the species-specific association to the Dolores River, which is outside of the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Spackman and Anderson 2002; NatureServe 2012.
Peabody milkvetch	*Astragalus pubentissimus (Astragalus pubentissimus* var. *peabodianus)*	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Entrenched channels on the south and west flanks of the Tavaputs Plateau in pinyon-juniper woodland and mixed desert shrub communities. Elevation range 4,300 to 5,800 feet amsl. Flowering May to early July.	Low.	No. Given the location of the Tavaputs Plateau in relation to the refined transmission corridor within Emery and Grand counties, Utah, it is unlikely that the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Grand counties, Utah.	BLM 2010; NatureServe 2012; UNPS 2006.
Trelease's milkvetch	*Astragalus racemosus* var. *treleasei*	BLM-WY	Range: Endemic to southwestern Wyoming; and Duchesne and Uintah counties in northeastern Utah. Found in the Green River Basin, the foothills of the Wyoming Range, and the Uinta Basin. Habitat: Eocene-Oligocene outcrops in the basins of Cenozoic lakes, Lake Gosiute, and Lake Uinta. In Wyoming, the species occurs on the Wasatch and Bridger Formations, on localized habitats of sparsely vegetated outwash flats and fluted Badland slopes. Elevation range unknown. Flowering June to July.	Region I: Low. Although species presence has not been documented within the refined transmission corridor, a WYNDD model-detailed analysis indicates the potential for occurrence within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sweetwater and Carbon counties, Wyoming.	Yes.	Heidel 2003; NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
San Rafael milkvetch	Astragalus rafaelensis	BLM-CO	Range: Endemic to the Navajo Basin within Emery, and less commonly, Grand counties, Utah; the Dolores River Valley in Montrose County, Colorado; and less commonly Mesa, and La Plata counties, Colorado. Habitat: Banks of sandy clay gulches, gullied hills, washes, talus under cliffs, in pockets at the foot of sandstone outcrops, or among boulders along dry watercourses. Substrates typically seleniferous clayey, silty or sandy. Elevation range 4,400 to 6,500 feet amsl. Flowering period late April to early June.	Region II: Low. No populations have been documented within or adjacent to the refined transmission corridor; however, although unlikely, potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Spring Mountains milkvetch	*Astragalus remotus*	BLM-NV	Range: Endemic to the southeastern slopes of the Spring Mountains within Clark County, Nevada. Habitat: Rocky, gravelly, and/or sandy calcareous soils derived from carbonate or sandstone, in washes and drainages, or on hillsides or rocky ledges, within the zonal desert shrub or desert wash communities. Elevation range 3,400 to 7,050 feet amsl. Flowering April to early June.	None.	No. The species is endemic to the Spring Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Cisco milkvetch	*Astragalus sabulosus var. sabulosus*	BLM-UT	Range: Endemic to the Grand River Valley within Grand County, Utah. Habitat: Salt desert shrub communities on the Mancos Shale Formation. Elevation range 4,250 to 5,250 feet amsl. Flowering late March to May.	Region II: Moderate. The species has been documented approx. 0.5 mile southeast of the refined transmission corridor in Grand County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Grand County, Utah.	Yes.	NatureServe 2012; UNPS 2006.
Stage Station milkvetch	*Astragalus sabulosus var. vehiculus*	BLM-UT	Range: Narrow endemic, known near head of Courthouse Wash within Grand County, Utah. Habitat: Shadscale, woody-aster, and galleta community on the Morrison Formation. Elevation range 4,500 to 4,800 feet amsl. Flowering April to May.	None.	No. The species is endemic to Courthouse Wash, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Escarpment milkvetch	*Astragalus striatiflorus*	BLM-UT	Range: Endemic to the Colorado Plateau within Kane and eastern Washington counties, Utah; and Coconino County, Arizona. Habitat: Interdune valleys, sandy depressions on ledges, and bars, and terraces in stream channels, in pinyon-juniper woodland, ponderosa pine, and sandy desert shrub communities. Elevation range 4,900 to 6,600 feet amsl. Flowering May to June.	None.	No. The species is endemic to the Colorado Plateau within Kane and eastern Washington counties, Utah, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Currant milkvetch	*Astragalus uncialis*	BLM-NV	Range: Endemic to the Great Basin within Millard County, Utah; and Nye County, Nevada. Habitat: Found in shadscale and budsage communities in Utah, and sagebrush communities in Nevada. Substrate is dry alkaline soils derived from limestone on dry knolls and in gullies, often associated with ancient terraces of Pleistocene lakes. Elevation range 4,600 to 6,000 feet amsl. Flowering April to mid June.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001; UNPS 2006.
Welsh's milkvetch	*Astragalus welshii*	BLM-UT	Range: Endemic to Garfield, eastern Iron, Kane, and Wayne counties, Utah. Habitat: Restricted to igneous gravels, in sagebrush, pinyon-juniper woodland, and sagebrush-aspen communities. Elevation range 6,560 to 9,220 feet amsl. Flowering May to early June.	None.	No. Although the associated vegetation cover types and geological substrate are present, the species occurs at a higher elevation that that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Iron County, Utah.	NatureServe 2012; UNPS 2006.
Guard milkvetch	*Astragalus zionis* var. *vigulus*	USFS-Dixie NF	Range: Endemic to the east slope of the Pine Valley Mountains in Washington County, Utah. Habitat: Pinyon-juniper, mountain mahogany, and oak-manzanita communities. Elevation range 5,900 to 8,200 feet amsl. Flowering late April to late June.	None.	No. The species is endemic to the east slope of the Pine Valley Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Pahrump silverscale	*Atriplex argentea* var. *longitrichoma*	BLM-NV	Range: Known only from the Pharump and Stewart valleys in southern Nye County, Nevada; and adjacent southeastern Inyo County, California. Habitat: Saline valley bottoms, open desert communities, roadways, and in agricultural fields with shrubby saltbush, creosote bush, mesquite, and annual weed species. Elevation range unknown. Flowering summer through fall.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	FNA 2001; NatureServe 2012.
Giant fourwing saltbush	*Atriplex canescens* var. *gigantea*	BLM-UT	Range: Found within Juab, Millard, and Tooele counties, Utah. Habitat: Sand dunes in interdune valleys or on the active, leeward dune margins with scurfpea, anomalous sunflower, and other sand-loving plant species. Elevation range 4,750 to 5,250 feet amsl. Flowering late June.	RegionII and III: High. The species has been documented within the refined transmission corridor in Millard County, Utah; and adjacent to the refined transmission corridor in Juab County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Juab and Millard counties, Utah.	Yes.	CPC 2010; UNPS 2010.
Dainty moonwort	*Botrychium crenulatum*	USFS-Ashley NF, USFS-Uinta-Wasatch-Cache NF; BLM-NV	Range: Found within Cache, Juab, Summit, and Wasatch counties, Utah; and also known throughout western U.S. and Canada. Habitat: Wet, marshy and springy areas, such as marshy meadows, marsh edges, saturated soils of seeps, bottom and stabilized margins of small streams, and occasionally along roads and ditches where moist. Prefers areas with shade, and dense cover within the montane zone. Elevation at approx. 8,000 feet amsl. Fronds mature June to July.	Region II: Moderate. The species has been documented approx. 22 miles north of the refined transmission corridor in Wasatch County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Utah, Juab, and Wasatch counties, Utah within the USFS-Uinta-Wasatch-Cache NF. Based on detailed habitat modeling, suitable habitat was not identified within the refined transmission corridor, analysis area, or within 1 mile of the alignment within the USFS-Uinta NF.	Yes.	NatureServe 2012; NNHP 2001; UNPS 2006.
Slender moonwort	*Botrychium lineare*	USFS-Ashley NF, USFS-Uinta-Wasatch-Cache NF	Range: Found within Duchesne and Salt Lake counties, Utah; and also in Alaska, California, Colorado, Idaho, Minnesota, Montana, Nevada, Oregon, and Washington, and Canada. Habitat: Typical habitat varies for the species. In Utah, it is normally found in grass-forb meadows, under trees in woods, and on shelves on limestone cliffs. Elevation range 4,900 to 6,600 feet amsl. Spores mature in late June or July.	Region II: High. The species has been documented within the refined transmission corridor in Duchesne County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah within the USFS-Ashley NF; and in Utah and Wasatch counties, Utah within the USFS-Uinta-Wasatch-Cache NF.	Yes.	NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Paradox moonwort	*Botrychium paradoxum*	USFS-Dixie NF	Range: Widely disjunct in Duchesne and Garfield counties in Utah; and in Montana, British Columbia, Alberta, and Saskatchewan. Total population estimates are unknown; however, the species is known from 21 to 80 occurrences. Habitat: In Utah, the species occur in open, moist, high elevation meadows. Elevation at approximately 10,800 feet amsl. Flowering July to August.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Duchesne and Garfield counties, Utah.	NatureServe 2012; UNPS 2006.
Alkali mariposa lily	*Calochortus striatus*	BLM-NV	Range: Known only within Nye and Clark counties, Nevada. Habitat: Moist, alkaline meadows around springs, creosote bush zone with *Distichlis spicata*, *Cleomella brevipes*, *Iva acerosa*, *Anemopsis californica*, and *Dodecatheon pulchellum*. Elevation range 2,100 to 3,700 feet amsl. Flowering April to June.	Regions III and IV: Moderate. The species has been documented approx. 8 miles west of the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Baird camissonia	*Camissonia bairdii*	BLM-UT	Range: Endemic to Washington County, Utah. Habitat: Blackbrush and pinyon-juniper woodland communities. Elevation range 3,900 to 4,300 feet amsl. Flowering period unknown.	Region III: Moderate. The species has been documented approx. 0.5 mile southeast of the refined transmission corridor in Washington County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Washington County, Utah.	Yes.	UNPS 2006.
Bolander's camissonia	*Camissonia bolanderi*	BLM-UT	Range: Narrowly restricted edaphic endemic to Emery County, Utah; known only from the upper Tidewell Draw in the San Rafael Desert. Habitat: Known only on the gypsiferous Triassic Moenkopi Formation, associated with *Atriplex* and *Ephedra*. Elevation of approximately 4,780 feet amsl.	None.	No. The species is endemic to the Triassic Moenkopi Formation which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Gould camissonia	*Camissonia gouldii*	BLM-UT	Range: Known only from the volcanic cones north of St. George in Washington County, Utah, and from Mohave and Coconino counties, Arizona. Habitat: Volcanic ash cones in pinyon-juniper woodland and big sagebrush communities. Elevation range 3,500 to 4,600 feet amsl. Flowering mid May to early July.	Region III: Moderate. The species has been documented approx. 9 miles southeast of the refined transmission corridor in Washington County, Utah. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Washington County, Utah.	Yes.	UNPS 2006.
Aquarius paintbrush	*Castilleja aquariensis*	USFS-Dixie NF	Range: Endemic to south-central Utah on the Aquarius Plataea in Garfield and Wayne counties, Utah. Habitat: Sagebrush/mixed-forb meadow openings with *Ribes*, columbine, silver sagebrush, groundsel, yarrow, fescue, penstemon, and cinquefoil, in open spruce-fir stands. Elevation range 9,800 to 11,300 feet amsl. Flowering July to August.	None.	No. The species is endemic to Garfield and Wayne counties, Utah, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Tushar paintbrush	*Castilleja parvula* var. *parvula*	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to Beaver and Garfield counties, Utah. Habitat: Alpine ridgetops and talus slopes above timberline on tertiary igneous sandy gravel with Engelmann spruce, *Cymopterus*, *Happlopappus*, *Monardella*, and *Ribes*. Elevation range 10,000 to 12,000 feet amsl. Flowering July.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Beaver and Garfield counties, Utah.	NatureServe 2012; UNPS 2006.
Reveal paintbrush	*Castilleja revealii* (*Castilleja parvula* var. *revealii*)	USFS-Dixie NF	Range: Endemic to southern Utah in Garfield, Kane, and Iron counties. Habitat: Ponderosa and bristlecone pine communities on gravelly soils of the Wasatch Limestone Formation. Elevation range 7,500 to 10,000 feet amsl. Flowering late June to August.	None.	No. The species occurs at a higher elevation and on different geologic formations than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Garfield, Kane, and Iron counties, Utah.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Monte Neva paintbrush	*Castilleja salsuginosa*	BLM-NV; NV State CE	Range: Endemic to Nevada; known within Eureka and White Pine counties. Habitat: An aquatic or wetland-dependent species occupying damp, open, alkaline to saline clay soils of hummocks and drainages on travertine hot spring mounds with *Sarcobatus vermiculatus, Chrysothamnus nauseosus,* and *Sporobolus airoides*. Elevation range 5,965 to 6,130 feet amsl. Flowering June to July.	None.	No. The species is endemic to Eureka and White Pine counties, Nevada, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Spring-loving centaury	*Centaurium namophilum*	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: An aquatic or wetland-dependent species found in open, moist to wet, alkali-crusted clay soil of seeps, springs, outflow drainages, meadows, and hummocks with saltbush, goldenweed, mountain rush, yerba mansa, and boraxweed. Elevation range 2,100 to 2,350 feet amsl. Flowering in summer.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Foothills Palo verde	*Cercidium microphyllum*	NPS-Lake Mead NRA	Range: Mojave and Sonoran deserts of Arizona, California, and Baja Mexico. Habitat: Habitat parameters unknown.	None.	No. Based on agency consultation, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NPS 2012.
Virgin River thistle	*Cirsium mohavense*	BLM-NV	Range: Restricted to the Mohave Desert region in Nevada; and also in California and Arizona. Habitat: Moist, low canyons, streambanks, and poorly drained alkaline flats, seeps, and springs in the desert, associated with saltbush. Elevation range 1,394 to 5,988 feet amsl. Flowering in summer.	None.	No. The species is endemic to the Mohave Desert region of Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Cedar Rim thistle	*Cirsium pulcherrimum* var. *aridum (Cirsium aridum)*	BLM-WY	Range: Endemic to the Green River Basin in Sublette County; Beaver Rim area in Fremont County; Sweetwater River Valley in Carbon County; and the east side of Flaming Gorge in Sweetwater County, Wyoming. Total population estimated at approx. 40,000 to 50,000 individuals. Habitat: Sparsely vegetated openings in Wyoming big sagebrush grasslands on barren chalky hills, gravelly slopes, fans and fine-textured sandy-shaley draws. Typically found on whitish-gray sandstone, chalk, tufaceous colluvium or clay substrates derived from the Split Rock, White River, Wagon Bed, Wind River, Green River, and Wasatch formations. Elevation range 5,800 to 7,500 feet amsl. Flowering June to July.	None.	No. The species is endemic to the Sweetwater River Valley and Flaming Gorge Reservoir, which are not crossed by the refined transmission corridor, analysis area or within 1 mile of the alignment.	NatureServe 2012; WYNDD 2009.
Virgin thistle	*Cirsium virginense*	NPS-Lake Mead NRA; BLM-UT	Range: Endemic to the Mojave Desert within Washington County, Utah; Clark County, Nevada; and Mohave County, Arizona. Habitat: Hanging gardens, saline seeps, washes, and stream terraces. Elevation range 2,800 to 3,100 feet amsl. Flowering May to September.	Low.	NPS-Lake Mead NRA: No. Based on agency consultation, this species is not likely to occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment within the NPS-Lake Mead NRA. BLM-UT: No. Although potential habitat may be present based on the presence of suitable topography and elevation range, it is unlikely that this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NPS 2012; NNHP 2001; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Goodrich cleomella	*Cleomella palmeriana* var. *goodrichii*	BLM-UT	Range: Endemic to Uintah County, Utah. Habitat: Eroded slopes of heavy clay in the Mancos, Tropic, and Morrison formations associated with *Machaeranthera venusta, Phacelia demissa, Astragalus flavus,* and *Atriplex corrugata*. Elevation range 4,000 to 6,000 feet amsl. Flowering May.	None.	No. Although the species has been documented approx. 7 miles south of the refined transmission corridor in Uintah County, Utah, it is unlikely this species would occur given the lack of species-specific geological formations within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; UNPS 2006.
Tecopa birdbeak	*Cordylanthus tecopensis*	BLM-NV	Range: In Nevada, known only from the Ash Meadows area and Fishlake Valley within Esmeralda and Nye counties, Nevada; and also in California. Habitat: Dependent on wetland margin areas in Nevada, this species occupies open, moist to saturated, alkali-crusted clay soils of seeps, springs, outflow drainages, and meadows, with *Distichlis spicata, Juncus balticus, Eleocharis, Spiranthes infernalis, Centaurium namophilum, Typha, Cirsium, Ivesia kingii* var. *eremica,* and *Ericameria albida*. Elevation range 2,100 to 4,900 feet amsl. Flowering summer to early fall.	None.	No. The species is known only from Esmeralda and Nye counties, Nevada, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Barneby's catseye	*Cryptantha barnebyi*	BLM-UT	Range: Endemic to the Uinta Basin in Uintah County, Utah. Habitat: Locally abundant on domed or gently-sloping white shale knolls of the Green River Formation, mostly in shadscale and pinyon-juniper woodland communities. Elevation range 6,060 to 7,875 feet amsl. Flowering May to June.	Region II: Moderate. The species has been documented approx. 2.5 miles north of the refined transmission corridor in Uintah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah County, Utah.	Yes.	BLM 2010; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Tufted cryptantha	*Cryptantha caespitosa*	BLM-CO	Range: Regional endemic to central and southern Wyoming and adjacent Utah, Idaho, and Moffat and Rio Blanco counties, Colorado. Habitat: Rocky or chalky ridgetops in cushion plant communities, forb-grass, pinyon-juniper woodland, mountain brush, limber pine, and spruce-fir forests of adobe soils of the Parachute Creek member of the Green River Formation. Elevation range 6,400 to 10,240 feet amsl. Flowering late April/May to June/early July.	Region I: High. The species has been documented within the refined transmission corridor in Moffat County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado. Region II: Moderate. The species has been documented approx. 11 miles south and west of the refined transmission corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Rio Blanco County, Colorado	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Mound cryptantha	*Cryptantha compacta*	BLM-UT	Range: Endemic to southwestern Millard County, Utah. Total population estimated at approx. 100,000 individuals. Habitat: Salt desert shrub and mixed desert shrub communities on Sevey Dolomite and gravelly loam on open slopes and ridges. Elevation range 6,200 to 7,400 feet amsl. Flowering May to July.	Low.	No. Although the species has been documented approx. 30 miles northwest of the refined transmission corridor in Millard County, Utah, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of suitable elevation range within Millard County, Utah.	NatureServe 2012; UNPS 2006.
Creutzfeldt-flower	*Cryptantha creutzfeldtii*	USFS-Manti-LaSal NF; BLM-UT	Range: Endemic to central Utah in Carbon, Emery and Sevier counties. Habitat: Shadscale and mat *Atriplex* communities on the Mancos Shale Formation. Elevation range 5,250 to 6,500 feet amsl. Flowering late April to June.	Region II: Moderate. The species has been documented approx. 1 mile northwest of the refined transmission corridor in Sevier County, Utah; approx. 2 miles north of the refined transmission corridor in Emery County, Utah; and approx. 3 miles southeast of the refined transmission corridor in Carbon County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery, Sevier, and Carbon counties, Utah. Suitable habitat was not identified within the refined transmission corridor, analysis area, or within 1 mile of the alignment within the USFS-Manti-LaSal NF.	Yes.	BLM 2010; NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Graham's catseye	*Cryptantha grahamii*	BLM-UT	Range: Endemic to the Uinta Basin in Duchesne and Uintah counties, Utah. Habitat: Mixed desert shrub, sagebrush, pinyon-juniper woodland and mountain shrub communities on Green River shale. Elevation range 5,000 to 7,400 feet amsl. Flowering May to June.	Region II: Moderate. The species has been documented approx. 1.5 miles south of the refined transmission corridor in Duchesne County, Utah; and 5 miles south of the refined transmission corridor in Uintah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne and Uintah counties, Utah.	Yes.	NatureServe 2012; UNPS 2006.
Las Vegas catseye	*Cryptantha insolita*	NV State CE	Range: Known only from the Las Vegas Valley and adjacent lower slopes of the Spring Mountains within Clark County, Nevada. Habitat: Light-colored, alkaline clay flats and low hills in the creosote bush zone. Elevation range 1,900 to 2,000 feet amsl. Flowering April to June.	Region IV: Moderate. The species has been documented approx. 4 miles west of the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the Las Vegas Valley within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Yellow-white catseye	*Cryptantha ochroleuca*	USFS-Dixie NF	Range: Endemic to Garfield and Iron counties in south-central Utah. Habitat: Pinyon-juniper, ponderosa pine, and bristlecone pine communities on the Pink limestone member of the Wasatch Formation, on unconsolidated alluvium. Elevation range 7,500 to 9,350 feet amsl. Flowering May to June.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Garfield and Iron counties, Utah.	NatureServe 2012; UNPS 2006.
Osterhout cryptantha	*Cryptantha osterhoutii*	BLM-CO	Range: Endemic to the Navajo Basin and found on the Colorado Plateau, this species is known within Mesa County, Colorado; Grand, Wayne, Garfield and San Juan counties , Utah; and perhaps Arizona. Habitat: Dry barren sites in reddish purple decomposed sandstone or in dry sandy soil in the desert, in blackbrush, mixed desert shrub, oak brush, salt bush, and pinyon-juniper woodland communities. Elevation range 4,500 to 6,560 feet amsl. Flowering April to early June/July.	Low.	No. Although potential habitat may be present based on the presence of suitable vegetation cover types and elevation range, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa County, Colorado.	Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Rollins cryptantha	*Cryptantha rollinsii*	BLM-CO	Range: Known from southwestern Wyoming; Emery, Uintah, Duchesne, and Carbon counties, Utah; and Moffat and Rio Blanco counties, Colorado. Habitat: Known from white shale slopes of the Green River Formation within pinyon-juniper woodlands and cold desert shrubland communities. Elevation range 5,300 to 5,800 feet amsl. Flowering May to June.	Regions I and II: High. The species has been documented within the refined transmission corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Rio Blanco County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Virgin River cryptantha	*Cryptantha virginensis*	NPS-Lake Mead NRA	Range: Endemic to California. Habitat: Sagebrush scrub, bristlecone pine forests, and pinyon-juniper woodland communities. Elevation range 6,234 to 10,171 feet amsl. Flowering period April to June.	None.	No. Based on agency consultation and lack of suitable habitat parameters, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Calflora 2012; NPS 2012.
Jones cycladenia	*Cycladenia humilis* var. *jonesii (Cycladenia jonesii)*	FT (UT)	Range: Endemic to Emery, Garfield, Grand, and Kane counties, Utah; and Coconino County, Arizona. Habitat: Gypsiferous saline soils on the Chinle, Cutler, and Summerville formations in *Eriogonum/Ephedra*, cool desert shrub, and juniper communities. Elevation range 4,400 to 6,000 feet amsl. Flowering mid May to June.	Region II: Moderate. The species has been documented approx. 10 miles southwest of the refined transmission corridor in Emery County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	Yes.	BLM 2010; USFWS 2012a; UDWR 2012; UNPS 2006.
Intermountain wavewing	*Cymopterus basalticus*	BLM-NV	Range: A Great Basin endemic, known within White Pine County, Nevada; and also in Utah. Habitat: Bare, basaltic rocks, barren clays, and gravelly hills and alluvial fans, mostly on dolomite (in Utah). Elevation range 5,800 to 6,900 (in Nevada). Flowering in spring.	Low.	No. Although suitable parameters may be present within Lincoln County, Nevada, it is unlikely the species would occur with the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Pinnate springparsley	*Cymopterus beckii*	USFS-Dixie NF, USFS-Manti-LaSal NF	Range: Endemic to San Juan and Wayne counties in Utah; and Navajo Nation Tribal Lands in Arizona. Habitat: Pinyon-juniper, mountain brush, ponderosa pine/Manzanita, conifer/oak, and Douglas-fir communities in sandy or stony places, often in rock crevices and near cliff bases on north and east exposures. Elevation range 5,600 to 7,500 feet amsl. Flowering April to July.	None.	No. The species is endemic to San Juan and Wayne counties, Utah, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Uinta Basin springparsley	*Cymopterus duchesnensis*	BLM-CO	Range: Known only from Duchesne and Uintah counties, Utah; and in adjacent Rio Blanco, Moffat, and Mesa counties, Colorado. Habitat: Found in cold desert shrub, sagebrush, and juniper communities on sandy clay and clay semi-barrens of the Mancos and Morrison shales (i.e., Morrison, Uintah, Wasatch and Green River formations). Elevation range 4,700 to 6,800 feet amsl. Flowering April and May.	Region I: Moderate. The species has been documented approx. 17 miles east of the refined transmission corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado. Region II: High. The species has been documented within the refined transmission corridor in Mesa County, Colorado. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa and Rio Blanco counties, Colorado.	Yes.	BLM 2010; Spackman and Anderson 2002; NatureServe 2012.
Cedar Breaks biscuitroot	*Cymopterus minimus*	USFS-Dixie NF	Range: Endemic to Garfield, Iron, and Kane counties, Utah. Habitat: Bristlecone pine, ponderosa pine, and spruce-fir communities on Claron Limestone. Elevation range 8,000 to 10,400 feet amsl. Flowering July to August.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Iron County, Utah.	NatureServe 2012; UNPS 2006.
Brownie ladyslipper	*Cypripedium fasciculatum*	USFS-Ashley NF	Range: Known from Cache, Salt Lake, Uintah, and Summit counties, Utah; and also Montana, Idaho, Wyoming, Colorado, Washington, Oregon, and California. Habitat: Duff in spruce-fir or lodgepole pine forests and along shaded streams. Elevation range 8,000 to 9,000 feet amsl. Flowering June to July.	None.	No. The species is not known to occur within the southern extent of the USFS-Ashley NF within Wasatch and Duchesne counties, Utah and is, therefore, unlikely to occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Stream stippleback lichen	*Dermatocarpon luridum*	BLM-NV	Range: Known distribution includes Washington, Oregon and California. Although the species is broadly distributed globally, the species is not known to occur within Nevada, Habitat: Grows on rocks, small boulders, and bedrock, submerged or seasonally emergent, adjacent to or in clear mountain streams, on seepy terraces, and in streams and rivers with red alder, Douglas-fir, western hemlock and riparian vegetation ranging from young stands to old-growth, and in streams in alpine meadows. Elevation range 1,000 to 6,500 feet amsl.	None.	No. The refined transmission corridor, analysis area, and within 1 mile of the alignment do not cross the geographic range of the species.	NatureServe 2012.
Gold Butte moss	*Didymodon nevadensis*	BLM-NV	Range: Known within Clark County, Nevada. Habitat: On or near gypsiferous deposits and outcrops or limestone boulders, especially on east to north facing slopes of loose uncompacted soil often associated with other mosses and lichens. Elevation range 1,310 to 2,315 feet amsl. Flowering late-winter to spring (i.e., October-April).	Regions III and IV: Low. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment near Las Vegas and Lake Mead, Nevada.	Yes.	NNHP 2001.
Rockcress draba	*Draba globosa (Draba densifolia* var. *apiculata*)	USFS-Ashley NF, USFS-Uinta-Wasatch-Cache NF	Range: Known within Duchesne, Juab, Salt Lake, and Summit counties, Utah; Gunnison and Lake counties, Colorado; and also Wyoming, Idaho, and Montana. Total population estimated at approx. 40 individuals. Habitat: Alpine meadows, granitic talus slopes, and rock crevices. Elevation range 11,500 to 12,500 feet amsl. Flowering June to August.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Duchesne counties, Utah.	Spackman and Anderson 2002; NatureServe 2012.
Maguire draba	*Draba maguirei*	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to Cache County, Utah. Habitat: Open areas in spruce and fir forests with substrates typically comprised of dolomite. Elevation range 5,500 to 9,500 feet amsl. Flowering June to July.	None.	No. The species is endemic to Cache County, Utah which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	CPC 2010; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Creeping draba	*Draba sobolifera*	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to the Tushar Mountains of Beaver County, Utah. Habitat: Alpine tundra and spruce-fir communities in igneous gravels and talus. Elevation range 10,000 to 12,100 feet amsl. Flowering July to August.	None.	No. The species occurs at a higher elevation and in very limited geographic range than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Beaver County, Utah.	NatureServe 2012; UNPS 2006.
Chalk liveforever	*Dudleya pulverulenta*	NPS-Lake Mead NRA	Range: Known with Clark and Nye counties, Nevada; and also within Arizona, California, and possibly Utah. Habitat: Habitat parameters unknown. Elevation range 2,100 to 5,512 feet amsl. Flowering period February to June.	None.	No. Based on agency consultation and lack of suitable habitat parameters, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001; NPS 2012.
Silverleaf sunray	*Enceliopsis argophylla*	NPS-Lake Mead NRA; BLM-NV	Range: Restricted to the Lake Mead area within Clark County, Nevada; and also known in Arizona and Utah. Habitat: Dry, open, relatively barren areas on gypsum badlands, volcanic gravels, loose sands in the creosote-bursage zone. Elevation range 1,165 to 2,380 feet amsl. Flowering continually.	Regions III and IV: High. The species has been documented within, and adjacent to, the NPS-Lake Mead NRA and within the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NNHP 2001; NPS 2012.
Ash Meadows sunray	*Enceliopsis nudicaulis* var. *corrugata*	BLM-NV	Range: Occurs within the Ash Meadows area within Nye County, Nevada; and also possibly in California. Habitat: Dry to somewhat moist, open, hard, whitish, strongly alkaline silty to clay soils, often on or near low calcareous outcrops, in spring and seep areas in the creosote-bursage and shadscale zones with shadscale saltbush, alkali goldenbush, saltgrass, and broom snakeweed. Elevation range 2,200 to 2,360 feet amsl. Flowering early spring.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Nevada willowherb	*Epilobium nevadense*	USFS-Fishlake NF, BLM-UT, BLM-NV	Range: Known within Iron, Millard, and Washington counties; and within the Charleston Mountains in Clark, Lincoln, and Eureka counties, Nevada. Habitat: Slopes with limestone outcrops or talus associated with singleleaf pinyon and ponderosa pine. Elevation range 6,000 to 8,930 feet amsl. Flowering July to September.	Regions II and III: Moderate. The species has been documented adjacent to the refined transmission corridor in Millard and Washington counties, Utah. Based on the presence of suitable elevation range, vegetation cover types, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Millard County, Utah; and Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001; UNPS 2006.
Antelope Canyon goldenbush	*Ericameria cervina*	BLM-NV	Range: Known within Clark and Lincoln counties, Nevada; and also in Utah and Arizona. Habitat: Rock crevices and talus in shadsacale and Douglas-fir-bristlecone pine communities. Often on calcareous substrates and less commonly on ash flow tuff. Elevation range 3,120 to 6,230 feet amsl. Flowering summer to early-fall.	Region III: Low. Although no known populations have been documented within or adjacent to the refined transmission corridor, suitable habitat parameters may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Greenwood goldenbush	*Ericameria lignumviridis (Haplopappus lignumviridis)*	BLM-UT	Range: Endemic to Sevier County, Utah. Habitat: According to UNPS, this species occupies crevices in igneous rock outcrops and cliffs above streams. According to FNA and NatureServe, this species occupies riparian areas with willow, nettle, conyza, and other bottomland plant species. Elevation range 6,150 to 6,250 feet amsl. Flowering August to September.	Low.	No. Although sparse patches of appropriate elevation range are present, it is unlikely the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah.	UNPS 2006; FNA 1995; NatureServe 2012.
Abajo daisy	*Erigeron abajoensis*	USFS-Manti-LaSal NF	Range: Endemic to Garfield, San Juan, and Sevier counties, Utah. Habitat: Rocky or gravelly open slopes in evergreen communities typically composed of sagebrush, pinyon-juniper woodland, ponderosa pine, or spruce-fir on limestone and igneous substrates. Elevation range 6,562 to 11,483 feet amsl. Flowering July to August.	Low.	No. Although potential habitat may be present based on the presence of suitable elevation range, vegetation cover types, and soil substrate, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment within the USFS-Manti-LaSal NF.	FNA 1947; NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Carrington daisy	*Erigeron carringtonae*	USFS-Manti-LaSal NF	Range: Endemic to Emery, Sanpete, and Sevier counties, Utah. Habitat: Meadows and escarpment margins on Flagstaff Limestone. Elevation range 10,000 to 11,000 feet amsl. Flowering July to early August.	Region II: High. The species has been documented within the refined transmission corridor in Emery County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah within the USFS-Manti-LaSal NF.	Yes.	UNPS 2006.
Cronquist daisy	*Erigeron cronquistii*	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the Bear River Range in Cache County, Utah. Habitat: Crevices in limestone cliffs and talus. Elevation range 5,750 to 8,500 feet amsl. Flowering May to August.	None.	No. The species is endemic to Cache County, Utah which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Kachina daisy	*Erigeron kachinensis*	USFS-Manti-LaSal NF; BLM-CO	Range: Endemic to the Colorado Plateau within White and Dark Canyons and Elk Ridge within San Juan County, Utah; and the Dolores River drainage within Montrose County, Colorado. Habitat: Habitats range from low elevation seeps and hanging gardens to high elevation mesic sandstone outcrops in aspen and ponderosa pine communities on saline soil. Elevation range 4,800 to 8,200 feet amsl. Flowering late April to August.	None.	No. The species is endemic to San Juan County, Utah and Montrose County, Colorado which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Spackman and Anderson 2002; NatureServe 2012; UNPS 2006.
Maguire daisy	*Erigeron maguirei*	USFS-Fishlake NF; BLM-UT	Range: Endemic to Emery, Garfield, and Wayne counties, Utah. Habitat: Cool, mesic wash bottoms and dry, partially shaded slopes of eroded sandstone cliffs within mountain shrub, Douglas-fir, ponderosa pine, and the lower limits of the juniper woodland communities on the Wingate, Chinle, and Navajo Sandstone formations. Elevation range 5,400 to 7,100 feet amsl. Flowering June to July.	Region II: Moderate. The species has been documented approx. one mile south of the refined transmission corridor in Emery County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah. Suitable habitat was not identified within the refined transmission corridor, analysis area, or within 1 mile of the alignment within the USFS-Fishlake NF.	Yes.	BLM 2010; NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
LaSal daisy	*Erigeron mancus*	USFS-Manti-LaSal NF	Range: Endemic to the LaSal Mountains of Grand and San Juan counties, Utah. Habitat: Subalpine fir, alpine grass/sedge and forb communities and found frequently in rockstripes. Elevation range 10,000 to 12,200 feet amsl. Flowering July to August.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Grand County, Utah.	UNPS 2006.
Sheep fleabane	*Erigeron ovinus*	BLM-NV	Range: Known only from the Sheep and Groom ranges and Mount Irish within Clark and Lincoln counties, Nevada. Habitat: Crevices in carbonate cliffs and ridgeline outcrops in the pinyon-juniper woodland and montane conifer zones. Elevation range 3,600 to 8,400 feet amsl. Flowering late June.	Low.	No. The species is only known within the Sheep and Groom Ranges and Mount Irish, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Untermann daisy	*Erigeron untermannii*	USFS-Ashley NF, BLM-UT	Range: Endemic to Duchesne County, Utah. Habitat: Pinyon-juniper, mountain mahogany, limber and bristlecone pine, and sagebrush communities on calcareous shale, sandstone, and siltstone of the Uinta and Green River formations. Elevation range 7,000 to 9,400 feet amsl. Flowering May to June.	Region II: High. The species has been documented both within and outside of the USFS-Ashley NF within the refined transmission corridor in Duchesne County, Utah. Potential habitat for the species may be present both within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah within the USFS-Ashley NF and on BLM lands.	Yes.	BLM 2008; NatureServe 2012; UNPS 2006.
Single-stemmed wild buckwheat	*Eriogonum acaule*	BLM-CO	Range: Known within Moffat County, Colorado; and also in eight counties in Wyoming. Habitat: Ridge tops, chalky or ashy barrens, and clay flats. Elevation range 5,680 to 6,820 feet amsl. Flowering June to July.	Regions I and II: Low. Based on the limited data available for the species, it is possible that potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado.	Yes.	NatureServe 2012.
Widtsoe buckwheat	*Eriogonum aretioides*	USFS-Dixie NF	Range: Endemic to Garfield County, Utah. Habitat: Bristlecone pine, ponderosa pine, Douglas-fir, and Rocky Mountain juniper communities on the Pink Limestone member of the Claron Formation. Elevation range 7,400 to 8,700 feet amsl. Flowering late May/June to August.	None.	No. The species is endemic to Garfield County, Utah which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Kaye's wild buckwheat	*Eriogonum artificis*	BLM-UT	Range: Known from one location in Beaver County, Utah. Habitat: Sandy to somewhat gravelly, volcanic slopes in mixed grassland and sagebrush communities, and juniper woodlands. Elevation range 6,000 to 6,040 feet amsl. Flowering August to September.	Low.	No. Although suitable vegetation cover types and soil substrate are present, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species-specific elevational range.	University of Maryland 2003.
Elsinore buckwheat	*Eriogonum batemanii* var. *ostlundii*	USFS-Fishlake NF	Range: Endemic to Sevier County, Utah. Habitat: Shadscale, mixed desert shrub, sagebrush, juniper and ponderosa pine communities on igneous gravels. Elevation range 5,500 to 6,500 feet amsl. Flowering July to September.	Region II: Moderate. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah within the USFS-Fishlake NF.	Yes.	UNPS 2006.
Pahrump Valley buckwheat	*Eriogonum bifurcatum*	BLM-NV	Range: Known within Clark and Nye counties, Nevada; and also in California. The distribution, as currently understood, straddles the Nevada/California state line, from Stewart Valley southeastward to Mesquite Valley. Habitat: Barren, saline, heavy clay or silty hardpan soils on and near dry playa margins, and on adjacent shore terraces and stabilized sand dunes, with *Atriplex confertifolia*, *A. hymenelytra*, *Prosopis glandulosa* var. *torreyana*, *Suaeda torreyana*, and *Grayia spinosa*. Elevation range 2,300 to 2,800 feet amsl. Flowering mid May to mid June.	Low.	No. Based on the species limited distribution, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Logan buckwheat	*Eriogonum brevicaule* var. *loganum*	USFS-Uinta-Wasatch-Cache NF	Range: Known within northern Utah in Box Elder, Cache, and Morgan counties. Habitat: Sagebrush-bunchgrass communities to sagebrush-subalpine conifer woodlands on rocky outcrops on sandy, gravelly, or limestone slopes. Elevation range 4,400 to 10,175 feet amsl. Flowering May to August.	None.	No. The species is known only within Box Elder, Cache, and Morgan counties, Utah, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
UNK	*Eriogonum brevicaule* var. *mitophyllum*	BLM-UT	Range: Known along Lost Creek near Sigurd, Utah in Sevier County, Utah. Habitat: Saltbush and juniper communities on Arapien Shale.	Region II: Low. Although the species has not been documented within the refined transmission corridor, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah.	Yes.	BLM 2011.
Darin buckwheat	*Eriogonum concinnum*	BLM-NV	Range: A Nevada endemic, known within Nye County, Nevada. Habitat: Deep loose sand derived from, or in crevices of light-colored tuff or other volcanic rocks, often at bases of cliffs or outcrops, in pinyon-juniper woodland, sagebrush, mixed-shrub, Blackbrush, and shadscale zones. Possibly dependent on sand dunes and deep sand. Elevation range 2,525 to 6,640 feet amsl. Flowering late-spring to early-fall.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Grand buckwheat	*Eriogonum contortum*	BLM-CO	Range: Known within Mesa and Garfield counties, Colorado; and Grand County, Utah. Habitat: Shadscale and saltbush communities on Mancos shale. Elevation range 4,200 to 5,100 feet amsl. Flowering May to August.	Region II: High. The species has been documented within the refined transmission corridor in Garfield and Mesa counties, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Garfield and Mesa counties, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Las Vegas buckwheat	*Eriogonum corymbosum var. nilesii*	FC (NV), BLM-NV, NV State CE#	Range: Known within Clark County and Lincoln County (near Toquop Wash), Nevada; and also in Washington County, Utah. Habitat: On and near gypsum soils, often forming low mounds or outcrops in washes and drainages, or in areas of generally low relief, often with *Arctomecon californica* and other gypsum-tolerant species, surrounded by *Ambrosia dumosa, Stanleya pinnata, Atriplex canescens, Ephedra torreyana, Larrea tridentata, Acacia greggii, Suaeda torreyana,* and *Psorothamnus* fremontii. Elevation range 1,900 to 3,839 feet amsl. Flowering August to November.	Region III (Nevada): High. The species has been documented within the refined transmission corridor in Lincoln County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark and Lincoln counties, Nevada. Region III (Utah): Moderate. The species has been documented approximately 26 miles east of the refined transmission corridor in Washington County, Utah. Although unlikely, potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Washington County, Utah. Region IV: Moderate. The species has been documented approx. 9 miles west of the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	Logan Simpson Design 2013; NatureServe 2012; NNHP 2001; Styles 2010; USFWS 2012a, 2010a.
Flat Top buckwheat	*Eriogonum corymbosum* var. *smithii*	BLM-UT	Range: Endemic to the Colorado Plateau within Emery and Wayne counties, Utah. Habitat: Found on the Entrada Formation and seleniferous stabilized dunes associated with purple-sage, matchweed, Ephedra/Indian ricegrass, desert shrub, and rabbitbrush communities. Elevation range 4,500 to 5,600 feet amsl. Flowering August to September.	Low.	No. Although potential habitat may be present within Emery County, Utah based on the presence of suitable elevation and soil substrate, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Ephedra buckwheat	*Eriogonum ephedroides*	BLM-CO	Range: Known within Rio Blanco and Moffat counties, Colorado; and adjacent Uintah County, Utah. Habitat: Found in juniper and sagebrush-grass communities on white shale of the Green River Shale Formation. Elevation range 5,600 to 6,030 feet amsl. Flowering June through late July/September.	Low.	No. Although known populations have been documented approx. 4 miles south of the refined transmission corridor in Rio Blanco County, Colorado, it is unlikely that potential habitat is present within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of suitable habitat parameters.	BLM 2010; NatureServe 2012.
Clokey buckwheat	*Eriogonum heermannii* var. *clokeyi*	BLM-NV	Range: Known within Clark and Nye counties, Nevada. Habitat: Carbonate outcrops, talus, scree, and gravelly washes and banks in the creosote-bursage, shadscale, and blackbrush zones. Elevation range 4,000 to 6,000 feet amsl. Flowering late spring to summer.	Low.	No. Although known populations have been documented approx. 27 miles west of the refined transmission corridor in Clark County, Nevada, it is unlikely that potential habitat is present within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of suitable habitat parameters.	NNHP 2001.
Ibex buckwheat	*Eriogonum ammophilum*	BLM-UT	Range: Endemic to Juab and Millard counties, Utah. Habitat: Shadscale, horsebrush, winterfat, rabbitbrush, ephedra, and pinyon-juniper woodland communities on alluvium and sandy soil. Elevation range 4,800 to 6,000 feet amsl. Flowering late June to mid August.	Regions II and III: Moderate. The species has been documented approx. 27 miles west of the refined transmission corridor in Millard County, Utah; and approx. 49 miles northwest of the refined transmission corridor in Juab County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Millard and Juab counties, Utah.	Yes.	UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Wirestem buckwheat	*Eriogonum pharnaceoides* var. *cervinum*	BLM-UT	Range: Endemic to Iron and Washington counties, Utah. Habitat: Pinyon-juniper, oakbrush, and ponderosa pine communities. Elevation range 6,000 to 8,700 feet amsl.	Region III: Moderate. The species has been documented immediately adjacent to the refined transmission corridor in Washington County, Utah. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Washington County, Utah.	Yes.	UNPS 2006.
Scarlet buckwheat	*Eriogonum phoenicium* (*Eriogonum microthecum* var. *phoeniceum*)	BLM-UT, BLM-NV	Range: Endemic to the Wah Wah Mountains within Millard County, Utah; and the Mahogany Mountains of Lincoln County, Nevada. Habitat: Found in pinyon-juniper woodlands and mountain mahogany communities on gray-white tuffaceous soils associated with sagebrush and *Eriogonum microthecum*. Elevation range 5,700 to 6,800 feet amsl. Flowering June to September.	Utah – None. Nevada - Low.	Utah – No. The species is endemic to the Wah Wah Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment. Nevada - No. Based on the species limited geographic range, elevation range, and substrate, potential habitat may be present in Lincoln County, Nevada; however, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment s in Lincoln, Nevada.	NNHP 2001; UNPS 2006.
Kaye H. Thorne's buckwheat	*Eriogonum spathulatum* var. *kayeae*	BLM-UT	Range: Known within the Squaw Peak area located south of the San Francisco Mountains in Beaver County, Utah. Habitat: Species-specific habitat parameters are unknown based on limited knowledge of the species.	None.	No. Based on the geographic range of the species, it is unlikely that this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2011 b.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Frisco buckwheat	*Eriogonum soredium*	FC (UT), BLM-UT	Range: Endemic to the San Francisco Mountains within the Great Basin in Beaver County, Utah. Habitat: Restricted to soils derived from Ordovician limestone outcrops in the San Francisco Mountains, the species is typically found on sparsely vegetated exposed slopes in pinion juniper and sagebrush communities. Elevation range 6,200 and 7,228 feet amsl. Flowering June to September.	None.	No. The species is endemic to the San Francisco Mountains, Utah which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006; USFWS 2012a, 2011b.
Woodside buckwheat	*Eriogonum tumulosum*	BLM-CO	Range: Known within Moffat County, Colorado; and also in Duchesne, Emery, and Uintah counties, Utah. Habitat: Mixed desert shrub and pinyon-juniper woodlands on rocky outcrops and sedimentary gravels or clays. Elevation range 5,800 to 6,300 feet amsl. Flowering late April to early July.	Regions I and II: Low. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.
Duchesne buckwheat	*Eriogonum viridulum*	BLM-CO	Range: Currently known only from Duchesne and Uintah counties, Utah. Known from potentially extirpated populations within Moffat County, Colorado. Habitat: Sandy or silty flats or clay slopes and hills, saltbush or sagebrush communities, pinyon-juniper woodlands. Elevation range 4,590 to 7,217. Flowering July to October.	Low.	No. Although potential habitat may be present, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the range of known occurrences.	NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Sticky buckwheat	*Eriogonum viscidulum*	NPS-Lake Mead NRA; NV State CE, BLM-NV	Range: Known within Clark and Lincoln counties, Nevada; and also in Arizona. Habitat: Dependent on sand dunes or deep sands, this species occupies deep loose sandy soils in washes, flats, roadsides, steep aeolian slopes, and stabilized dune areas associated with *Ambrosia dumosa, Larrea tridentata, Pleuraphis rigida, Krameria parvifolia, Achnatherum hymenoides, Tamarix ramosissima, Tessaria sericea, Astragalus geyeri* var. *triquetrus, A. sabulonum, Eriogonum trichopes, Ephedra torreyana, Dicoria canescens, Pediomelum, Croton californicus, Sporobolus cryptandrus, Psorothamnus fremontii, Abronia,* and *Tiquilia*. Elevation range 1,200 to 2,200 feet amsl. Flowering April to May.	Regions III and IV: High. The species has been documented within the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada. Based on agency consultation and suitable habitat parameters, this species is not likely to occur within the refined transmission corridor within the NPS-Lake Mead NRA.	Yes.	NatureServe 2012; NNHP 2001; NPS 2012: USFWS 2010a.
Utah spurge	*Euphorbia nephradenia*	BLM-UT	Range: Endemic to the Colorado Plateau within Emery, Garfield, Kane, and Wayne counties, Utah; and also in Colorado. Habitat: Mat saltbush, blackbrush, ephedra, mixed sandy desert shrub, and grassland communities on dark clay hills, blow sand and stabilized dunes mainly from the Tropic Shale and Entrada formations. Elevation range 3,800 to 4,800 feet amsl. Flowering June to August.	Region II: Moderate. The species has been documented approx. 4 miles southwest of the refined transmission corridor in Emery County, Utah. Based on agency consultation and the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	Yes.	BLM 2011; UNPS 2006.
Mojave barrel cactus	*Ferocactus cylindraceus var. lecontei*	NPS-Lake Mead NRA	Range: Known in Clark County, Nevada, and also in California, Arizona, Utah, and Mexico. Habitat: Gravelly or rocky hillsides, canyon walls, alluvial fans, and wash margins or sandy flats in desert. Elevation range 2,460 to 4,921. Flowering period unknown.	None.	No. Based on agency consultation and lack of suitable habitat parameters within the refined transmission corridor, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	EOL 2012; NPS 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Ackerman's green gentian	*Frasera ackermaniae*	BLM-UT	Range: Restricted endemic known only from Uintah County, Utah. Habitat: Clay semi-barrens of the Chinle Formation with scattered *Juniperus osteosperma*. Elevation range 5,830 to 6,000 feet amsl. Flowering June.	None.	No. Although the species has been documented approx. 24 miles north of the refined transmission corridor, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the absence of the species-specific geological formation and elevational range.	BLM 2010; UNPS 2006.
Sunnyside green gentian	*Frasera gypsicola*	BLM-NV; NV State CE	Range: Known within Nye and the White River Valley east of the Egan Range in White Pine counties, Nevada; and also in Utah. Habitat: Open, dry, whitish, alkaline, often salt-crusted and spongy silty-clay soils on calcareous flats and barrens, with little if any gypsum content, in cushion-plant associations surrounded by sagebrush, greasewood, and occasionally barberry and swamp cedar communities with *Artemisia pygmaea, A. tridentata, Eriogonum shockleyi, Physaria chambersii, Cryptantha welshii, Hymenopappus filifolius, Phlox tumulosa,* and *Lepidium nanum*. Elevation range 5,180 to 5,510 feet amsl. Flowering June to July.	None.	No. Although potential habitat may be present based on the presence of suitable vegetation cover types and soil substrate, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species narrow and limited geographic range.	NatureServe 2012; NNHP 2001.
Tufted green gentian	*Frasera paniculata*	BLM-CO	Range: Known within Mesa County, Colorado; and also in southeast Utah, northeast Arizona, and northwest New Mexico. Habitat: Dry, deep, sandy soils in desert shrub and pinyon-juniper woodland communities. Elevation range 3,700 to 6,500 feet amsl. Flowering June to early July.	Region II: Low. Based on the presence of suitable vegetation cover types and elevation range, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa County, Colorado.	Yes.	NatureServe 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Utah gentian	*Gentianella tortuosa*	BLM-CO	Range: Known from Rio Blanco County, Colorado, central and southwest Utah, and southern Nevada. Habitat: Sagebrush through spruce-fir forests on shale outcrops of the Green River Formation. Elevation range 8,500 to 10,800 feet amsl. Flowering July to August.	Low.	No. Although the species has been documented approx. 20 miles east of the refined transmission corridor in Rio Blanco County, Colorado, it is unlikely the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of suitable vegetation cover types and elevation range parameters.	Spackman and Anderson 2002; NatureServe 2012.
Wonderland Alice flower	*Gilia caespitosa*	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to Wayne County, Utah. Habitat: On Navajo and Wingate sandstone in crevices, Carmel Limestone formations, detrital slopes, and (infrequently) in sandy wash bottoms within open pinyon-juniper woodland communities, often mixed with mountain brush, sagebrush, or ponderosa pine. Elevation range 5,100 to 9,000 feet amsl. Flowering June to July.	None.	No. The species is endemic to Wayne County, Utah which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012.
Narrowstem gilia	*Gilia stenothyrsa*	BLM-CO	Range: Known from Mesa and Rio Blanco counties, Colorado; and Carbon, Duchesne, Emery and Uintah counties, Utah. Habitat: Found in open places often in hills of pinyon-juniper woodland, salt desert shrub, sagebrush, and mountain-mahogany communities in silty to gravelly loams and sandy or clay alkaline soils, sandstone and siltstone shale or clay barrens all of the Green River and Uinta formations. Elevation range 5,000 to 9,320 feet amsl. Flowering late May to June thru early July.	Region II: High. The species has been documented within the refined transmission corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat and Rio Blanco counties, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Smooth dwarf greasebush	*Glossopetalon pungens* var. *glabrum*	BLM-NV	Range: Restricted to the Spring and Sheep ranges within Clark County, Nevada; and also in California. Habitat: Crevices of carbonate cliffs and outcrops, generally avoiding southerly exposures, in the pinyon-juniper woodland, mountain mahogany, and montane conifer zones. Elevation range 6,000 to 7,800 feet amsl. Flowering mid April to early July.	None.	No. The species is restricted to the Spring and Sheep ranges, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Ash Meadows gumplant	*Grindelia fraxinopratensis*	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Open, flat, whitish, strongly alkaline, clay soils in or bordering meadows and shallow drainages near springs and seeps, sometimes in disturbed areas within the creosote-bursage and shadscale zones in ash-mesquite woodlands, shadscale scrub, or saltgrass meadows. Aquatic or wetland-dependent species. Elevation range 2,070 to 2,320 feet amsl. Flowering in summer.	None.	No. The species is endemic to the Ash Meadows of Nye County, Nevada, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Pine Valley goldenweed (Pine Valley goldenbush)	*Ericameria crispa* (*Haplopappus crispus*)	USFS-Dixie NF, BLM-UT	Range: Endemic to the Pine Valley Mountains in Washington County, Utah. Habitat: Ponderosa pine, manzanita, spruce-fir, mountain mahogany, and aspen communities. Elevation range 8,100 to 10,000 feet amsl. Flowering August to October.	Low.	No. Although the species has been documented approx. 6 miles southeast of the refined transmission corridor, potential habitat parameters (specifically elevation range) are not present within the refined transmission corridor. It is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Cedar Breaks goldenbush	*Haplopappus zionis*	BLM-UT	Range: Endemic to Kane, Garfield, and Iron counties, Utah. Habitat: Spruce-fir and ponderosa pine communities, mostly on limestone members of the Cedar Breaks (Claron limestone) Formation. Elevation range 8,000 to 10,000 feet amsl. Flowering mid-July to August.	None.	No. Based on the species elevation range and geological formation requirements, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Canyon sweetvetch	*Hedysarum occidentale* var. *canone*	USFS-Manti-LaSal NF	Range: Endemic to Carbon, Duchesne, and Emery counties, Utah. Habitat: Pinyon-juniper, serviceberry, maple, mountain mahogany, and sagebrush communities. Elevation range 6,400 to 8,300 feet amsl. Flowering late June to mid August.	Region II: Low. The species has been documented within the refined transmission corridor in Emery County, Utah; however, no populations were documented within the USFS-MantiLaSal NF. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah within the USFS-Manti-LaSal NF.	Yes.	NatureServe 2012; UNPS 2006.
Jones goldenaster	*Heterotheca jonesii*	USFS-Dixie NF	Range: Endemic to southern Utah in Washington, Kane, and Garfield counties, Utah. Habitat: Ponderosa pine, manzanita, Douglas-fir communities on sandstone or in sand. Elevation range 5,200 to 9,000 feet amsl. Flowering May to September.	Low.	No. Based on the species vegetation cover type association requirements, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Rock hymenoxys	*Hymenoxys lapidicola*	BLM-UT	Range: Endemic to Uintah County, Utah. Habitat: Rock crevices in ponderosa pine-manzanita and pinyon-juniper woodland communities of the Weber Formation. Elevation range 6,000 and 8,100 feet amsl. Flowering period unknown.	None.	No. Although the species has been documented approx. 7 miles north of the refined transmission corridor in Uintah County, Utah, it is unlikely this species would occur given the lack of species-specific geological formations within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Red Rock Canyon aster	*Ionactis caelestis*	BLM-NV	Range: Endemic to the type locality in the Sandstone Bluffs -Red Rock Canyon area of the Spring Mountains, Clark County, Nevada. Habitat: Crevices in exposed, sparsely vegetated outcrops of Aztec sandstone in the pinyon-juniper woodland and lower montane-conifer zones, with *Fendlerella utahensis, Poa secunda, Amelanchier utahensis, Hymenopappus filifolius, Arctostaphylos pungens, Arenaria congesta* var. *charlestonensis, Glossopetalon pungens, Pinus ponderosa,* and *P. monophylla*. Elevation at approx. 6,810 feet amsl. Flowering June.	None.	No. The species is endemic to the Spring Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Rock purpusia	*Ivesia arizonica* var. *saxosa*	BLM-NV	Range: Endemic to Lincoln and Nye counties, Nevada. Habitat: Crevices of cliffs and boulders on volcanic and possibly carbonate rocks in the upper mixed-shrub, sagebrush, and pinyon-juniper woodland zones. Elevation range 4,925 to 6,800 feet amsl. Flowering late spring to summer.	Low.	No. Although potential habitat may be present based on the presence of suitable elevation range, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of species-specific substrate and vegetation community type habitat requirements.	NNHP 2001.
Jaeger ivesia	*Ivesia jaegeri*	BLM-NV	Range: Restricted to the Spring Mountains within Clark County, Nevada; and also in California. Habitat: Rock crevices of limestone cliffs and lower-angle bedrock outcrops. Elevation range 5,200 to 11,060 feet amsl. Flowering June to August.	None.	No. The species is endemic to the Spring Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Ash Meadows mousetails	*Ivesia kingii* var. *eremica*	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Open, moist to saturated, whitish, heavy to chalky alkaline clay soils in meadows on flats, drainages, and bluffs near springs and seeps, in saltgrass meadow, shadscale, and ash-mesquite vegetation. Aquatic or wetland-dependent species. Elevation range 2,150 to 2,350. Flowering late-spring to early-fall.	None.	No. The species is endemic to the Ash Meadows of Nye County, Nevada, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Ostler's ivesia	*Ivesia shockleyi* var. *osterli*	BLM-UT	Range: Endemic to the Wah Wah Mountains and Needle Range of western Beaver County, Utah. Habitat: Pinyon-juniper and adjacent ponderosa pine communities in crevices of quartzite and whitish outcrops. Elevation range 6,400 to 7,900 feet amsl. Flowering May to August.	None.	No. Although the species has been documented approx. 14 miles northwest of the refined transmission corridor in Beaver County, Utah, the species is endemic to the Wah Wah Mountains and Needle Range, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Wasatch jamesia	*Jamesia americana* var. *macrocalyx*	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the Wasatch Mountains and the Deep Creek Mountains in Salt Lake, Wasatch, Utah, Juab, and Tooele counties, Utah. Habitat: Mountain brush and spruce/fir communities, including cracks and crevices of rocky slopes, in granite or limestone cliffs. Elevation range 5,700 to 12,000 feet amsl within the Wasatch Mountains; 5,500 to 6,700 feet amsl within the Deep Creek Mountains. Flowering June to mid August.	Region II: Moderate. The species has been documented approx. 14 miles northwest of the refined transmission corridor in Utah County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Utah and Wasatch counties, Utah within the USFS-Uinta-Wasatch-Cache NF.	Yes.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Zion jamesia	*Jamesia americana* var. *zionis*	USFS-Dixie NF	Range: Endemic to Zion Canyon, and adjacent areas near Kanab, Utah within Iron, Kane, and Washington counties, Utah. Habitat: Pinyon-juniper, oak, and ponderosa pine communities in hanging gardens, sandstone crevices, and cliff sides and bases. Elevation range 3,900 to 8,200 feet amsl. Flowering June to July, sometimes into early August.	Low.	No. Based on the species limited distribution and geographic range, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Four-petal jamesia (waxflower)	*Jamesia tetrapetala*	BLM-UT, BLM-NV	Range: Endemic to the Great Basin within Millard County, Utah; and Nye, Lincoln, and White Pine counties, Nevada. Habitat: Found in crevices on Paleozoic limestone outcrops and talus at cliff bases associated with chokecherry, mountain mahogany, ephedra, and sagebrush. Elevation at approx. 7,600 feet amsl. Flowering June.	Low.	No. Although the species has been documented approx. 21 miles west of the refined transmission corridor in Millard County, Utah, it is unlikely that this species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the species geologic substrate and limited elevation range.	NNHP 2001; UNPS 2006.
Bullfrog Hills sweetpea	*Lathyrus hitchcockianus*	BLM-NV	Range: Possible or probable Nevada endemic, known within Nye County, Nevada. Habitat: Open, dry to slightly moist gravels of rocky drainage bottoms in canyons and on upper alluvial slopes, often at bases of boulders or canyon walls and climbing up through shrubs, in volcanic tuff or carbonate rocks in the mixed-shrub, sagebrush, and pinyon-juniper woodland zones. Elevation range 4,000 to 6,900 feet amsl. Flowering in spring.	Region III: Low. Although no known populations have been documented within or adjacent to the refined transmission corridors, suitable habitat parameters may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Barneby ridgecress	*Lepidium barnebyanum*	FE (UT)	Range: Known only from three ridges near Indian Canyon on the Uintah and Ouray Reservations of the Ute Indian Tribe within the Uinta Basin, Duchesne County, Utah. Total population estimated at approx. 5,000 individuals. Habitat: Poorly developed soils derived from marly shale outcrops in a zone of interbedding geologic strata from the Uinta and Green River formations within pinyon-juniper woodland communities dominated by other similar pulvinate plants. Elevation range 6,200 to 6,500 feet amsl. Flowering early May.	Region II: Moderate. Known populations have been documented approx. 3 miles northwest of the refined transmission corridor in Duchesne County, Utah. Based on the presence of suitable elevation range, vegetation cover types and geologic formations, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah.	Yes.	BLM 2010; USFWS 2012a, 1993a, 1990a.
Huber pepperplant	*Lepidium huberi*	BLM-UT	Range: Endemic to Uintah County, Utah. Habitat: Black sagebrush, mountain brush, ponderosa pine, lodgepole pine, and spruce-fir communities in sand or silty sands derived from the Shinarump Member of the Chinle, Park City, and Weber Sandstones. Elevation range 5,000 to 9,700 feet amsl. Flowering June to August.	None.	No. Based on the species geographic range and habitat parameters, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah County, Utah.	BLM 2010; UNPS 2006.
Neeses' peppergrass	*Lepidium montanum* var. *neeseae*	USFS-Dixie NF	Range: Endemic to the Table Cliff Plateau in Garfield County, Utah. Habitat: Ponderosa pine and spruce-fir communities, mainly on the Pink and White members of the Wasatch Formation and Navajo Sandstone. Elevation range 7,700 to 8,800 feet amsl. Flowering May to June.	None.	No. The species is endemic to Garfield County, Utah which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Ostler's peppergrass	*Lepidium ostleri*	FC (UT); BLM-UT	Range: Endemic to the San Francisco Mountains within the Great Basin in Beaver County, Utah. Habitat: Crevices in limestone outcrops typically in pinyon-juniper woodland communities. Elevation range 5,800 to 6,800 feet amsl. Flowering June to early July.	None.	No. The species is endemic to the San Francisco Mountains, Utah which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006; USFWS 2012a, 2011b.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Dudley Bluffs bladderpod	*Lesquerella congesta* (*Physaria congesta*)	FT (CO)	Range: Known within the northern Piceance Basin in Rio Blanco County, Colorado. Total population estimated at approx. 550,000 to 600,000 individuals. Habitat: Barren, white shale outcrops along downcutting drainages associated with the Piceance and Yellow creeks on the Thirteenmile Creek Tongue of the Green River; and Uintah formations surrounded by mesas with pinyon-juniper woodlands. Elevation range 6,140 to 6,644 feet amsl. Flowering period unknown.	None.	No. The species is endemic to the Piceance Basin which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Spackman and Anderson 2002; NatureServe 2012; USFWS 2012a, 1990b.
Garrett bladderpod	*Lesquerella garrettii*	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the central Wasatch Mountains, known from Big Cottonwood Canyon to Provo Peak, within Salt Lake County, Utah. Habitat: Sparsely vegetated subalpine and alpine communities on semi-stable talus slopes and basin floors with rocky-gravelly soils and also in crevices along rocky ridges, and infrequently in pockets of exposed, coarse soil on slopes with large rocks and boulders. Elevation range 8,890 to 12,010 feet amsl. Flowering June to August.	Low.	No. Based on the species limited distribution and geographic range, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012.
Piceance bladderpod	Lesquerella parviflora	BLM-CO	Range: Endemic to the Piceance Basin within Rio Blanco, Garfield, and Mesa counties, Colorado. Habitat: Outcrops of the Green River Shale Formation on ledges and slopes of canyons in open areas of pinyon-juniper woodland communities with soils of the Torriorthent Rock outcrop complex. Frequently associated species include *Pinus edulis, Juniperus osteosperma, Eriogonum* sp.*, Cirsium* sp.*, Astragalus lutosus, Cercocarpus* sp.*, Galium coloradense, Oryzopsis hymenoides, Penstemon* sp.*, and Machaeranthera* sp. Elevation range 6,200-8,600 feet amsl. Flowering June to July.	None.	No. The species is endemic to the Piceance Basin which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Maquire's bitterroot	*Lewisia maguirei*	BLM-NV	Range: Endemic to the Quinn Canyon and Grant ranges in Nye County, Nevada. Habitat: Dry, sparsely vegetated carbonate scree or shallow gravelly-clay soils on steep slopes and ridgelines of all aspects in the pinyon-juniper woodland zone with desert frasera, Torrey's milkvetch, and stemless fournerve daisy. Elevation range 7,360 to 8,280 feet amsl. Flowering late-spring.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Canyonlands lomatium (Wideleaf bisquitroot)	*Lomatium latilobum*	BLM-UT, BLM-CO, USFS- Manti-LaSal NF	Range: Endemic to Grand and San Juan counties, Utah; and Mesa County, Colorado. Habitat: Rock crevices and sandy deposits of the Entrada and Navajo Sandstone Formations or the contact point of the Wingate and Chinle formations, often found in slot canyons and between fins within pinyon-juniper woodland and desert shrub communities. General elevation range 4,050 to 7,250 feet amsl. In Utah, 5,000 to 6,000 feet amsl. In Colorado, 5,000 to 7,000 feet amsl. Flowering April to June.	None.	No. Although potential habitat may be present based on the presence of suitable vegetation cover types and elevation range, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of species-specific geologic formation associations.	NatureServe 2012; UNPS 2006.
Scrub lotus	*Lotus argyraeus* var. *multicaulis*	BLM-NV	Range: Known within the Ivanpah-Pahrump Valley Watershed within Clark County, Nevada. Habitat: Pinyon-juniper woodlands. Elevation range 3,900 to 4,925 feet amsl. Flowering period unknown.	None.	No. The species is only known within the Ivanpah-Pahrump Valley Watershed, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Jepson Flora Project 1993; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Dolores rushpink (Dolores River skeletonplant)	*Lygodesmia grandiflora* var. *doloresensis* (*Lygodesmia doloresensis*)	BLM-UT	Range: Known within Grand County, Utah; and Mesa County, Colorado. Habitat: Juniper, sagebrush, rabbitbrush, and blackbrush communities in reddish alluvial soil. Elevation range 4,600 to 4,700 feet amsl. Flowering June.	Low.	No. Although potential habitat may be present based on the presence of suitable soil substrates, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the lack of species-specific vegetation cover type associations.	UNPS 2006.
Entrada rushpink (Entrada skeletonplant)	*Lygodesmia entrada*	BLM-UT	Range: Endemic to Emery, Grand, and San Juan counties, Utah. Habitat: Mixed desert shrub and juniper communities. Elevation range 4,400 to 4,800 feet amsl. Flowering June.	Region II: Low. Based on agency consultation and the presence of suitable vegetation cover types and elevation range, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Grand counties, Utah.	Yes.	BLM 2010; UNPS 2006.
Pioche blazingstar	*Mentzelia argillicola*	BLM-NV, BLM-UT	Range: Known only from a relatively small area in Lincoln County, Nevada, ranging from the northern end of Meadow Valley in the vicinity of Panaca to the southern end of Lake Valley on both sides of Patterson Wash north of Pioche; and an oil shale endemic from Sanpete and Sevier counties, Utah. Habitat: In Nevada, dry soft, silty clay soils on knolls and slopes with sparse vegetation consisting most notably of *Artemisia pygmaea*, *Eriogonum nummulare*, *Gutierrezia sarothrae*, and *Salvia dorrii* var. *dorrii.* In Utah, talus or scree slopes of the Arapien Shale Formation, with little to no vegetation. Elevation range 4,890 to 5,645 feet amsl. Flowering late May to August.	Region II (Utah): Moderate. The species has been documented immediately adjacent to the refined transmission corridor in Sevier County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah. Region III (Nevada): Low.	Utah – Yes. NV - No. The refined transmission corridor do not cross the Meadow Valley Wash Watershed in Lincoln County, Nevada; therefore, it is unlikely that the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2011; Holmgren and Holmgren 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Goodrich blazingstar (Goodrich stickleaf)	*Mentzelia goodrichii*	USFS-Ashley NF, BLM-UT	Range: Endemic to the escarpments of the Willow and Argyle canyons within southern Duchesne County, Utah. Found along Bad Land Cliffs above Argyle Canyon, and west in to Avintaquin Canyon. Habitat: Steep, white, marly calciferous shale of the Green River Formation in scattered limber and pinyon pine, Douglas-fir, mountain mahogany, and rabbitbrush communities. Elevation range 8,100 to 8,800 feet amsl. Flowering July to August.	Region II: High. The species has been documented both within and outside of the USFS-Ashley NF within the refined transmission corridor in Duchesne County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah within the USFS-Ashley NF.	Yes.	BLM 2010; NatureServe 2012; UNPS 2006.
Ash Meadows blazingstar	*Mentzelia leucophylla*	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Open, generally dry, hard, salt-crusted alkaline clay or sandy-clay soils on low bluffs, swales, flats, and drainages in shadscale vegetation surrounding spring and seep areas. Elevation range 2,200 to 2,350 feet amsl. Flowering in summer.	None.	No. The species is endemic to Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Horse Canyon stickleaf	*Mentzelia multicaulis var. librina*	BLM-UT	Range: Endemic to the Colorado Plateau within Carbon and Emery counties, Utah. Habitat: Sagebrush, rabbitbrush, and pinyon-juniper woodland communities on the Mancos Shale and Price River formations. Elevation at approx. 6,200 feet amsl. Flowering July to September.	Region II: Moderate. The species has been documented approx. 6 miles east of the refined transmission corridor in Emery County, Utah. Based on the presence of suitable elevation range, vegetation cover types and geologic formations, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Carbon counties, Utah.	Yes.	BLM 2010; UNPS 2006.
Polished blazingstar	*Mentzelia polita*	BLM-NV	Range: Known within Esmeralda, Clark, and Lincoln counties, Nevada; and California. Habitat: Open areas in mixed desert shrub communities. Elevation range 1,475 to 4,495 feet amsl. Flowering April to May.	Region III and IV: Low. Although no known populations have been documented within or adjacent to the refined transmission corridor, suitable habitat parameters may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Roan Cliffs stickleaf	*Mentzelia rhizomata*	BLM-CO	Range: An endemic oil shale species known within Garfield County, Colorado Habitat: Steeply sloping and constantly moving talus or scree slopes of the Green River Formation shale in Colorado associated with *Astragalus lutosus, Thalictrum heliophilum, Penstemon debilis*, and *Festuca dasyclada*. Elevation range 5,800 to 9,000 feet amsl. Flowering May to August.	Low.	No. Although the species has been documented approx. 42 miles east of the refined transmission corridor, it is unlikely that the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Garfield County, Colorado based on the lack of suitable habitat.	NatureServe 2012.
Shultz stickleaf	*Mentzelia shultziorum*	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Shadscale, *Eriogonum,* and ephedra communities on the Cutler Formation. Elevation range at 4,100 to 5,200 feet amsl. Flowering July to August.	Region II: Moderate. The species has been documented approx. 3 miles south of the refined transmission corridor in Emery County, Utah; and approx. 18 miles south of the refined transmission corridor in Grand County, Utah. Based on agency consultation and the presence of suitable elevation range and vegetation cover types, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Grand counties, Utah.	Yes.	BLM 2010; UNPS 2006.
Tiehm blazingstar	*Mentzelia tiehmii*	BLM-NV	Range: Endemic to the White River Valley within northeastern Nye County and adjacent Lincoln County, Nevada. Habitat: Sparsely vegetated, white calcareous knolls and bluffs with scattered perennials (*Artemisia nova*, *Atriplex confertifolia*, *Chrysothamnus parryi* var. *asper*, *Enceliopsis nudicaulis* var. *nudicaulis*, *Frasera gypsicola*, *Hymenopappus filifolius* var. *nanus*, *Lepidium nanum*, and *Phlox tumulosa*) and annuals (*Cordylanthus kingii* var. *kingii* and *Eriogonum howellianum*). Elevation range 4,925 to 5,200 feet amsl. Flowering late June to early September.	None.	No. The species is endemic to the White River Valley, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; Holmgren and Holmgren 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Eastwood monkey-flower	*Mimulus eastwoodiae*	BLM-CO	Range: Endemic to the Canyonlands of southeastern Utah and adjacent Colorado, Arizona, and New Mexico. In Colorado, approximately 8 occurrences are known from Montrose, Mesa, San Miguel, and Delta counties. Habitat: Moist seeps and hanging garden communities in sandstone cliffs in the Canyonlands associated with *Primula specuicola*, *Adiantum capillus-veneris*, *Aquilegia micrantha*, and *Epipactis gigantea*. Elevation range 4,700 to 5,800 feet amsl. Flowering late July to early September.	Low.	No. Although potential habitat may be present based on the presence of suitable vegetation cover types and soil substrate, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species narrow and limited geographic range.	Spackman and Anderson 2002; NatureServe 2012.
Fish Lake naiad	*Najas caespitosa (Najas flexilis)*	USFS-Fishlake NF	Range: Endemic to Pelican Point, Fish Lake in Sevier County, Utah. Habitat: Shallow water to a depth of 12 inches. Elevation at approx. 8,600 feet amsl. Flowering late July to August.	None.	No. Based on the species limited distribution geographic range, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Amargosa niterwort	*Nitrophila mohavensis*	BLM-NV	Range: Known only from the Carson Slough-Ash Meadows area in Nye County, Nevada. Habitat: Open, moist, heavily alkaline and salt-crusted, otherwise nearly barren clay flats in low drainage and seepage areas surrounded by shadscale and saltgrass vegetation. Aquatic or wetland-dependant species. Elevation range 2,100 to 2,160 feet amsl. Flowering late-spring.	None.	No. The species is known only from Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Narrowleaf evening primrose	*Oenothera acutissima*	BLM-CO	Range: Restricted to Moffat County, Colorado and Uintah and Duchesne counties, Utah; known in the vicinity of the Flaming Gorge National Recreation Area and around Diamond Mountain, Cold Spring Mountain, and Douglas Mountain at the eastern end of the Uinta Mountains. The species has been documented as far west as Burnt Mill Spring, northwest of Roosevelt, and as far east as Boone Draw, below Sand Wash Basin in Moffat County, Colorado. Habitat: Grows along arroyos, in drainage channels, in depressions or shallow basins, in meadows or gravelly open areas, and in rock crevices within middle elevation conifer forests (ponderosa and lodgepole pine), rocky mountain juniper-sagebrush communities, and sagebrush scrub communities. Typically restricted to sandy/gravelly soils, often growing among rocks; appears to be associated with a red quartzite of the Uinta Mountain Group. Elevation range 3,900 to 8,530 feet amsl. Flowering late May to June.	Low.	No. Based on the species limited distribution geographic range, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; Spackman and Anderson 2002; NatureServe 2012.
Sand cholla	*Opuntia pulchella (Grusonia pulchella)*	BLM-NV; NV State CY	Range: Known within Churchill, Douglas, Esmeralda, Lander, Lincoln, Mineral, Nye, Pershing, and Washoe counties, Nevada; and also in Arizona, California, and Utah. Habitat: Dependent on sand dunes or deep sands in Nevada, this species occupies sand of dunes, dry-lake borders, river bottoms, washes, valleys, and plains. Elevation range 3,950 to 6,300 feet amsl. Flowering May to June.	Region III: Low. Based on the elevation range and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Blue Diamond cholla	*Opuntia whipplei* var. *multigeniculata* (*Cylindropuntia multigeniculata)*	BLM-NV; NV State CE; NV State CY	Range: Endemic to the Blue Diamond Hills of the Spring Mountains within Clark County, Nevada. Habitat: Dry, open carbonate ledges, crevices, and rocky colluvium on gentle to steep slopes of all aspects, but predominantly on northerly exposures, canyon walls, or other cooler or more protected exposures, in close proximity to overlying gypsum beds up-slope, and associated with numerous other succulent and shrub species of the creosote bush and blackbrush vegetation zones. Elevation range 3,585 to 4,250 feet amsl. Flowering June to July.	None.	No. The species is endemic to the Blue Diamond Hills of the Spring Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Trotter oreoxis	*Oreoxis trotteri*	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Warm desert shrub and mixed juniper communities. Elevation range 4,800 to 6,000 feet amsl. Flowering late April to mid June.	Region II: Moderate. Known populations are present approx. 18 miles south of the refined transmission corridor in Grand and Emery counties, Utah. Based on agency consultation and the presence of suitable elevation range and vegetation cover types, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Grand counties, Utah.	Yes.	BLM 2010; UNPS 2006.
Arctic poppy	*Papaver radicatum* var. *pygmaeum*	USFS-Ashley NF	Range: Known from the Uinta Mountains in Duchesne and Summit counties, Utah; and also Montana and Alberta, Canada. Habitat: Rock stripes in alpine tundra communities with *Polemonium*, *Smelowskia*, *Erigeron*, sedges, and saxifrages. Elevation range 11,100 to 12,800 feet amsl. Flowering July to August.	None.	No. The species is endemic to the Uinta Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Colorado feverfew	*Parthenium ligulatum*	BLM-CO	Range: Known from Rio Blanco and Moffat counties, Colorado; and also in Utah and Nevada. Habitat: Barren or semi-barren calciferous or gypsiferous outcrops of the Green River, Uinta, Ferron, Summerville, and Carmel formations in salt desert shrub, serviceberry, rabbitbrush, Indian rice-grass, greasebush, galleta, black sagebrush, pygmy sagebrush, and pinyon-juniper woodland communities. Elevation range 5,590 to 7,000 feet amsl. Flowering May/June.	Region II: Low. Based on the presence of suitable elevation range, geologic formations, and vegetation cover types, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat and Rio Blanco counties, Colorado.	Yes.	Spackman and Anderson 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
San Rafael cactus (Despain pincushion cactus)	*Pediocactus despainii*	FE (UT)	Range: Endemic to Emery and Wayne counties, Utah. Habitat: Open pinyon-juniper woodland communities on limestone gravels. Elevation at approx. 6,000 feet amsl. Flowering late April to early May.	Region II: Moderate. The species has been documented adjacent to the refined transmission corridor in Emery County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	Yes.	BLM 2010; CPC 2010; NatureServe 2012; USFWS 2012a, 2007, 1995b; UDWR 2012; UNPS 2006.
Siler pincushion cactus	*Pediocactus sileri*	FT (UT)	Range: Known within Kane and Washington counties, Utah; and Mohave and Coconino counties, Arizona. Habitat: Salt desert shrub communities in red and gray gypsiferous, seleniferous, and calciferous shales of the Moenkopi Formation often found growing with or in thick biological soil crusts. Elevation range 3,000 to 5,200 feet amsl. Flowering March to April/May.	Region III: Moderate. The species has been documented approx. 27 miles southeast of the refined transmission corridor in Washington County, Utah. Based on the presence of suitable elevation range, soil substrates, and vegetation cover types, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Washington County, Utah.	Yes.	USFWS 2012a, 1986; UNPS 2006.
Winkler cactus	*Pediocactus winkleri*	FT (UT)	Range: Endemic to Emery and Wayne counties, Utah. Habitat: Salt desert shrub communities on small gravel barrens or clay on the Dakota Formation. Elevation range 4,800 and 5,200 feet amsl. Flowering late March to mid May.	Region II: Moderate. The species have been documented approx. 2.5 miles east of the refined transmission corridor in Emery County, Utah. Based on agency consultation and the presence of suitable elevation range, soil substrates, and vegetation cover types, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	Yes.	BLM 2010; CPC 2010; USFWS 2012a, 2007, 1995b; UDWR 2012; UNPS 2006.
Barneby breadroot	*Pediomelum aromaticum* var. *barnebyi*	BLM-UT	Range: Restricted to southeast Washington County, Utah; and adjacent Mohave County, Arizona. Habitat: Pinyon-juniper and silver buffaloberry communities on fine-textured substrates of the Chinle Formation. Elevation at approx. 4,400 feet amsl. Flowering July to August.	Low.	No. Although potential habitat may be present based on the presence of suitable vegetation cover types and geologic formation, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species limited geographic range.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Beaver Dam breadroot	*Pediomelum castoreum*	NPS-Lake Mead NRA; BLM-NV	Range: Known within Lincoln and Clark counties, Nevada; and also in Arizona and California. Habitat: Limited information available; possibly dry, sandy deserts. Elevation range 1,280 to 5,000 feet amsl. Flowering period unknown; most common survey period: April to May.	Region III: High. The species has been documented within the refined transmission corridor in Clark County, Nevada. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln and Clark counties, Nevada. Region IV: Low. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada. Based on agency consultation and lack of suitable habitat parameters, it is unlikely that this species would occur within the refined transmission corridor, analysis area, or within 1 mile of the alignment within the NPS-Lake Mead NRA.	Yes.	NNHP 2001; NatureServe 2012; NPS 2012.
Paria breadroot	*Pediomelum pariense*	USFS-Dixie NF	Range: Endemic to Kane and Garfield counties, Utah. Habitat: Ponderosa pine and pinyon-juniper woodland communities on calcareous or sandy soils on Wasatch Limestone. Elevation range 5,600 to 8,000 feet amsl. Flowering June to July.	None.	No. The species is endemic to Kane and Garfield counties, Utah which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Stemless beardtongue	*Penstemon acaulis* var. *acaulis*	USFS-Ashley NF, BLM-UT	Range: Endemic to Sweetwater County, Wyoming. Habitat: Pinyon-juniper and sagebrush-grass communities on semi-barren substrates. Elevation range 5,840 to 7,285 feet amsl. Flowering June to July.	None.	No. The species is endemic to Daggett County, Utah which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; NatureServe 2012; UNPS 2006; WYNDD 2009.
White-margined beardtongue	*Penstemon albomarginatus*	BLM-NV, NV State CE#	Range: Clark and Nye counties, Nevada; and also in Arizona and California. Habitat: Dependent on sand dunes or deep sand, this species occupies stabilized desert dunes and Mojavean desert scrub habitats. Elevation range 2,750 to 5,890 feet amsl. Flowering March to May.	Regions III and IV: Moderate. The species has been documented approx. 8 miles west of the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NNHP 2001.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Neese narrowleaf penstemon	*Penstemon angustifolius* var. *dulcis*	BLM-UT	Range: Endemic to the Great Basin within Juab and Millard counties, Utah. Habitat: Fourwing saltbush, sagebrush/*Eriogonum* and juniper communities in dune sands. Elevation range 4,600 to 5,400 feet amsl. Flowering May to June.	Regions II and III: Moderate. The species has been documented immediately adjacent to the refined transmission corridor in Millard and Juab counties, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Millard and Juab counties, Utah.	Yes.	UNPS 2006.
Yellow twotone beardtongue	*Penstemon bicolor* ssp. *bicolor*	BLM-NV	Range: Possibly an endemic to Clark County, Nevada; and also in California. Habitat: Calcareous or carbonate soils in washes, roadsides, rock crevices, outcrops, or similar places receiving enhanced runoff, in the creosote-bursage, blackbrush, mixed-shrub, and lower juniper zones. Elevation range 2,500 to 5,480 feet amsl. Flowering spring.	Regions III and IV: Moderate. The species has been documented approx. 2.5 miles west of the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NNHP 2001.
Rosy twotone beardtongue	*Penstemon bicolor* ssp. *roseus*	NPS-Lake Mead NRA; BLM-NV	Range: Known within Clark and Nye counties, Nevada; and also in Arizona and California. Habitat: Rocky calcareous, granitic, or volcanic soils in washes, roadsides, scree at outcrop bases, rock crevices, or similar places receiving enhanced runoff, in the creosote-bursage, blackbrush, and mixed-shrub zones. Elevation range 1,800 to 4,840 feet amsl. Flowering mid March to mid May.	Regions III and IV: High. The species has been documented in numerous locations within the refined transmission corridor in Clark County, Nevada. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada. Based on agency consultation and lack of suitable habitat parameters, it is unlikely that this species would occur within the refined transmission corridor, analysis area, or within 1 mile of the alignment within the NPS-Lake Mead NRA.	Yes.	NNHP 2001; NPS 2012.
USF Red Canyon beardtongue	*Penstemon bracteatus*	USFS-Dixie NF	Range: Endemic to Garfield, Iron, Kane counties, Utah. Habitat: Ponderosa pine, limber pine, bristlecone pine/manzanita communities in stone slides and calcareous gravels of the Pink and White limestone members of the Claron Formation. Elevation range 6,900 to 8,500 feet amsl. Flowering May to July.	Low.	No. Based on the lack of suitable elevation range and vegetation cover type requirements, it is unlikely that potential habitat would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Cache beardtongue	*Penstemon compactus*	USFS-Uinta-Wasatch-Cache NF	Range: Known within Cache County, Utah; and also Franklin County, Idaho. Habitat: Openings in coniferous communities, associated with *Monardella*, clematis, columbine, and other penstemon species, on limestone and dolomite parent material. Elevation range 7,000 to 9,800 feet amsl. Flowering June to August.	None.	No. The species has been documented within Cache County, Utah, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Tunnel Springs beardtongue	*Penstemon concinnus*	BLM-NV	Range: Endemic to the Great Basin within Beaver, Iron and Millard counties, Utah. Barely entering Nevada, the species is known from a few extant occurrences within White Pine and Lincoln counties. Habitat: Alluvial slopes within pinyon, juniper, or sagebrush communities. Elevation range between 6,200 to 6,600 feet amsl. Flowering May to June.	Region III: Low. Based on the presence of suitable vegetation cover types, soil substrates, and elevation range, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NNHP 2001; Protect Snake Valley 2010.
Parachute beardtongue	*Penstemon debilis*	FT (CO)	Range: Endemic to Garfield County, Colorado. Habitat: Sparsely vegetated, south-facing, steep, white shale talus of the Parachute Creek Member of the Green River Formation. Soils are a mixture of thin shale fragments and clay. Elevation range 8,000 to 9,000 feet amsl. Flowering mid June to mid July.	Low.	No. The species has been documented approx. 41 miles east of the refined transmission corridor in Garfield County, Colorado; however, based on suitable habitat and agency consultation, it is unlikely that this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species-specific associated vegetation communities.	Spackman and Anderson 2002; USFWS 2012a,b, 2011c.
Franklin penstemon	*Penstemon franklinii*	BLM-UT	Range: Endemic to Cedar Valley within Iron County, Utah. Habitat: Associated with three-awn, needlegrass, matchweed, and black sagebrush communities. Elevation range 5,400 to 5,900 feet amsl. Flowering May to June.	Region III: Low. Based on agency consultation, known populations have been documented adjacent to the refined transmission corridor in Iron County, Utah. Although unlikely, potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Iron County, Utah.	Yes.	BLM 2012b; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Death Valley beardtongue	*Penstemon fruticiformis* ssp. *amargosae*	BLM-NV	Range: Clark and Nye counties, Nevada; and also in California. Habitat: Gravely washes, canyon floors and juniper-pine woodlands. Elevation 3,100 to 6,330 feet amsl. Flowering April to June.	Low.	No. Although potential habitat may be present based on the presence of suitable soil substrates and elevation range, it is unlikely the species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment given the species-species vegetation cover type requirements.	CPC 2010; NNHP 2001.
Gibbens penstemon (Gibbens beardtongue)	*Penstemon gibbensii*	BLM-WY, BLM-CO, BLM-UT	Range: Known within Moffat and Rio Blanco counties, Colorado; and Carbon and Sweetwater counties, Wyoming. Habitat: Sandy or shaly (often Green River Shale) bluffs and slopes with juniper, thistle, *Eriogonum, Elymus*, serviceberry, rabbitbrush, and *Thermopsis*. Elevation range 5,500 to 7,700 feet amsl. Flowering June to September.	Region I: Wyoming - High. The species has been documented within the refined transmission corridor in Sweetwater and Carbon counties, Wyoming. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sweetwater and Carbon counties, Wyoming. Region I: Colorado – Moderate. The species has been documented on the Sweetwater County, Wyoming/Moffat County, Colorado border. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Moffat County, Colorado. Region I: Utah – None. The refined transmission corridor do not intersect Daggett County, Utah.	Yes.	BLM 2010; NatureServe 2012; UNPS 2006; WYNDD 2009.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Goodrich penstemon	*Penstemon goodrichii*	BLM-UT	Range: Endemic to the Uinta Basin at the Lapoint-Tridell-Whiterocks area, Utah. Habitat: Blue gray to reddish clay badlands of the Duchesne River Formation in shadscale and juniper-mountain mahogany communities. Elevation range 5,600 to 6,200 feet amsl. Flowering late May to June.	Region II: Moderate. The species has been documented approx. 4 miles north of the refined transmission corridor in Duchesne County, Utah; and 10 miles north of the refined transmission corridor in Uintah County, Utah. Based on agency consultation and the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne and Uintah counties, Utah.	Yes.	BLM 2010; UNPS 2006.
Graham's penstemon	*Penstemon grahamii*	FT (CO), BLM-CO, BLM-UT	Range: Restricted to the Uinta Basin in Uintah, Carbon, and Duchesne counties, Utah; and adjacent Rio Blanco County, Colorado. Habitat: Sparsely vegetated shadscale, *Eriogonum*, horsebrush, ryegrass, and pinyon-juniper woodland communities on shale ledges and talus on the Green River Formation. Elevation range 4,600 to 7,600 feet amsl. Flowering late May to mid-June.	Region II: High. The species has been documented within and adjacent to the refined transmission corridor in Uintah and Duchesne counties, Utah. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah and Duchesne counties, Utah; and Rio Blanco County, Colorado.	Yes.	BLM 2010; NatureServe 2012: USFWS 2012a; UNPS 2006.
Blowout penstemon	*Penstemon haydenii*	FE (WY)	Range: Known within the Sandhills region of Nebraska and the northeastern Great Divide Basin in Carbon County, Wyoming. Habitat: Substrate of eroding and shifting sand with low vegetation cover, typically found in "blowouts" (i.e., depressions in the topography caused by wind erosion) with less than 10 percent basal ground cover. Elevation range unknown. Flowering mid May to late June.	None.	No. Although populations are present approx. 30 miles north of the refined transmission corridor; it is unlikely the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Carbon County, Wyoming based on the lack of potential habitat.	Heidel 2012; Stubbendieck, et al. 1989; USFWS 2012a, 2011d, 1992a.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Pennell beardtongue	*Penstemon leiophyllus* var. *francisci-pennellii*	BLM-NV	Range: Known from the Snake, Wilson Creek, southern Schell Creek, Egan, and Grant ranges in Lincoln, Nye, and White Pine counties, Nevada; also in Utah. Habitat: Rocky calcareous slopes on shaded banks. Elevation range 7,000 to 11,500 feet amsl. Flowering period unknown; most common survey months: July to August.	None.	No. The refined transmission corridor does not intersect Nye or White Pine counties, Nevada. The species-specific elevation range parameters are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	NatureServe 2012; NNHP 2001.
Pahute Mesa beardtongue	*Penstemon pahutensis*	BLM-NV	Range: Known within Esmeralda and Nye counties, Nevada; and also in California. Habitat: In loose soil and rock crevices among boulders in pinyon-juniper woodlands and sagebrush shrublands. Elevation range 5,360 to 8,240 feet amsl. Flowering June to mid July.	None.	No. The species is known only within Nye and Esmeralda counties, Nevada, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Little penstemon	*Penstemon parvus*	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to Garfield and Sevier counties, Utah. Habitat: Black sagebrush, silver sagebrush, and grass/forb communities on sandy gravelly loam and Tertiary volcanic gravels. Elevation range 8,500 to 10,500 feet amsl. Flowering late June to August.	Low.	No. Although populations are present approx. 7 miles south of the refined transmission corridor, it is unlikely the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah based on the lack of potential habitat.	NatureServe 2012; UNPS 2006.
Pinyon penstemon	*Penstemon pinorum*	USFS-Dixie NF, BLM-UT	Range: Endemic to the Pine Valley Mountains within Iron and Washington counties, Utah. Habitat: Pinyon-juniper, mountain mahogany, ephedra, oak, sagebrush, and less commonly greasewood communities, often on Claron Limestone or gravels. Elevation range 5,600 to 6,700 feet amsl. Flowering May to June.	Region III: High. The species has been documented within the refined transmission corridor in Iron and Washington counties, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Iron and Washington counties, Utah.	Yes.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
White River beardtongue (White River penstemon)	*Penstemon scariosus (Penstemon scariosus* var. *albifluvis)*	FP (CO, UT), BLM-UT	Range: Known within Uintah County, Utah; and Rio Blanco County, Colorado. Habitat: Mixed desert shrub and pinyon-juniper woodland communities dominated by shadscale, rabbitbrush, ricegrass, ryegrass, sagebrush, and Barneby's thistle on sparsely vegetated tan shale slopes of the Green River Formation. Elevation range 5,000 to 6,880 feet amsl. Flowering late May to June.	Region II: Moderate. The species has been documented approx. 7 miles west of the refined transmission corridor in Rio Blanco County, Colorado; and approx. 9 miles southeast of the refined transmission corridor in Uintah County, Utah. Based on agency consultation and the presence of suitable habitat requirements, the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah County, Utah and Rio Blanco County, Colorado.	Yes.	BLM 2010; Spackman and Anderson 2002; USFWS 2012a, 2011e,f; UNPS 2006.
Jaeger beardtongue	*Penstemon thompsoniae* ssp. *jaegeri*	BLM-NV	Range: Known within the Spring Mountains, east to the Sheep Range, in Clark County, Nevada. Habitat: Gravelly limestone soils on knolls and sloes, in drainages, and under conifers, from the pinyon-juniper woodland to the subalpine conifer zones. Elevation range 5,577 to 11,060 feet amsl. Flowering late-spring to summer.	None.	No. The species is endemic to the Spring Mountains, which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Ward beardtongue	*Penstemon wardii*	BLM-UT, USFS-Fishlake NF	Range: Endemic to Millard, Sanpete, and Sevier counties, Utah. Habitat: Arapien Shale Formation associated with ephedra, rabbitbrush, shadscale, mountain mahogany, sagebrush, and pinyon-juniper woodland communities on semi-barren, white to gray, fine-textured, often calcareous or gypsiferous substrates. Elevation range 5,500 to 6,800 feet amsl. Flowering period unknown.	Region II: Moderate. The species has been documented adjacent to the refined transmission corridor in Sevier and Millard counties, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier and Millard counties, Utah on BLM and USFS-Fishlake NF lands.	Yes.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Alcove rock-daisy	*Perityle specuicola*	BLM-UT	Range: Regional endemic to canyons along the Colorado and San Juan Rivers in southeast Utah; also along the Colorado River Canyon near Moab, within the Glen Canyon National Recreation Area; and along the main canyon of the San Juan River within Garfield, Grand, and San Juan counties, Utah. Total population estimated at approx. 660 individuals. Habitat: Desert shrub and hanging garden communities in narrow, protected canyons, alcoves, and at cliff bases where it receives minimal to no direct sunlight on the Navajo Sandstone and the Cedar Mesa Formation. Elevation range 3,700 to 4,200 feet amsl. Flowering mid July to late September.	None.	No. Potential habitat for the species is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.
Parry petalonyx	*Petalonyx parryi*	BLM-UT	Range: Known within Washington County, Utah; western Coconino and northern Mohave counties, Arizona; and Clark County, Nevada. Habitat: Dry, desert washes, and canyons, often on gypsum and micaceoius shales with *Phacelia, Psorothamnus,* and *Atriplex* species on Chinle and Moenkopi outcrops. Elevation range and flowering period unknown.	Region III: Low. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment within Washington County, Utah.	Yes.	NatureServe 2012; UNPS 2006.
Clay phacelia	*Phacelia argillacea*	FE (UT)	Range: Known only within the Spanish Fork Canyon of Utah County, Utah. Total population estimated at approx. 200 individuals. Habitat: Steep slopes in sparsely populated juniper-pinyon and mountain brush communities on shaley clay colluviums of the Green River Formation. Elevation range 6,000 to 7,000 feet amsl. Flowering late May to early June.	Region II: High. The species has been documented within the refined transmission corridor in Utah County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Utah County, Utah.	Yes.	Atwood 1975; Tilley et al. 2011; USFWS 2012a, 1982; UDWR 2012; Welsh et al. 1987

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Argyle Canyon phacelia	*Phacelia argylensis*	BLM-UT	Range: Endemic to Argyle Canyon, adjacent to West Tavaputs Plateau in Duchesne County, Utah. Habitat: Pinyon-juniper, serviceberry, and Douglas Fir communities. Elevation range and flowering period unknown.	Region II: Moderate. The species has been documented adjacent to the refined transmission corridor in Duchesne County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah.	Yes.	BLM 2011.
Beatley scorpion plant	*Phacelia beatleyae*	BLM-NV	Range: Endemic to Lincoln and Nye counties, Nevada. Habitat: Dry, open, nearly barren scree and loose gravelly soils on slopes and bases of white to brownish volcanic tuff outcrops on all slopes and aspects, and in adjacent drainages, in the mixed-shrub, blackbrush, shadscale, and upper creosote-bursage zones. Elevation range 3,540 to 5,500 feet amsl. Flowering April to May.	Low.	No. Although potential habitat may be present, it is unlikely the species would occur within the refined transmission corridor , analysis area, and within 1 mile of the alignment based on the location of the associated geologic formations and known occurrence populations.	NNHP 2001.
Parish phacelia	*Phacelia parishii*	BLM-NV	Range: Known within Clark, Lincoln, Nye, and White Pine counties, Nevada. Habitat: An aquatic or wetland-dependent species in Nevada occupying moist to superficially dry, open, flat to hummocky, mostly barren, often salt-crusted silty-clay soils on valley bottom flats, lake deposits, and playa edges, often near seepage areas, sometimes on gypsum deposits, surrounded by saltbush scrub vegetation but with few immediate associates such as *Atriplex confertifolia, A. canescens, A. argentea, Poa secunda, Monolepis nuttalliana, Phacelia fremontii, Lepidium flavum,* and *Sarcobatus vermiculatus*. Elevation range 2,190 to 5,920 feet amsl. Flowering late spring.	Regions III and IV: Low. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark and Lincoln counties, Nevada.	Yes.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Debeque phacelia	*Phacelia submutica*	FT (CO)	Range: Endemic to the Piceance Basin within Mesa and Garfield counties, Colorado. Total population estimated at approx. 3,594 to 34,504 individuals within 28 populations. Habitat: Exposures of dark gray and brown clay soils derived from the Atwell Gulch and Shire members of the Wasatch Formation on moderately steep slopes, barren or semi-barren hillsides, benches, and ridge tops adjacent to valley floors. Flowering late April to late June.	None.	No. The species is endemic to the Piceance Basin which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Spackman and Anderson 2002; Lyon et al. 2001; USFWS 2012a,b, 2011c.
Utah phacelia	*Phacelia utahensis*	BLM-UT	Range: Known within Sanpete and Sevier counties, Utah; possibly also found in Carbon County, Utah. Habitat: Salt desert shrub communities on clay hills and banks in the Arapien Shale Formation (and possibly the Mancos Shale Formation). Elevation range 5,500 to 6,200 feet amsl. Flowering April to June.	Region II: High. The species has been documented within the refined transmission corridor in Sevier County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah.	Yes.	BLM 2010; UNPS 2006.
Dudley Bluffs twinpod	*Physaria obcordata*	FT (CO)	Range: Endemic to the Piceance Basin in Rio Blanco County, Colorado. Habitat: Barren white outcrops and steep slopes exposed by creek downcutting associated with the Green River Formation. Elevation range 5,900 to 7,500 feet amsl. Flowering May/June to June/August.	None.	No. The species is endemic to the Piceance Basin which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Spackman and Anderson 2002; USFWS 2012a.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Limber pine	*Pinus flexilis*	BLM-WY	Range: Widespread across the northern and central Rocky Mountains, and the Great Basin regions in Canada. It is patchily distributed across Oregon, Idaho, Montana, Wyoming, Nevada, Utah, Colorado, and New Mexico. In the Dakotas, Nebraska, Arizona, and California, isolated populations occur. Habitat: Dry, rocky sites in forested regions on mesic sites in low density, open area. In Wyoming, it is typically found with Rocky Mountain lodgepole pine, Engelmann spruce, whitebark pine, Rocky Mountain Douglas-fir, subalpine fire, Rocky Mountain juniper, and common juniper. General elevation range 4,000 to 12,500 feet amsl; specific elevation ranges for Wyoming are not available. Buds burst late April to late June, while pine cones ripen from August to September, and seeds are dispersed from September to October	None.	No. Based on the deletion of Segment 10 (former Aelous Design Option), potentially suitable habitat for this species is no longer present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Carbon County, Wyoming.	BLM 2012a; Johnson 2001; NatureServe 2012; USGS 1999.
Western prairie fringed orchid	Platanthera praeclara	FT	Range: The species occurs in Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and Oklahoma. Habitat: Western prairie fringed orchid occurs on wet mesic calcareous subirrigated prairies and sedge meadows along the floodplain of the Platte River.	None. This species occurs in the floodplain of the Platte River in central Nebraska.	Yes. The species is included in analyses because of the water depletion evaluation requirement in the Platte River Basin.	PRRIP 2006; Sidle and Faenes 1997
Angell cinquefoil	*Potentilla angelliae*	USFS-Dixie NF	Range: Endemic to the Aquarius Plateau in Garfield and Wayne counties, Utah. Habitat: Rocky, subalpine meadows. Elevation at approx. 11,000 feet amsl. Flowering July.	None.	No. The species is endemic to the Aquarius Plateau in Garfield and Wayne counties, Utah, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Cottam cinquefoil	*Potentilla cottamii*	USFS-Uinta-Wasatch-Cache NF, BLM-UT	Range: Known only from the Pilot Range within Elko County, Nevada; and Box Elder, Juab, and Tooele counties, Utah. Habitat: Crevices or narrow ledges on outcrops of quartzite or other siliceous metamorphic or granitoid rocks on all aspects in the upper subalpine conifer zone with *Pinus flexilis*, *Abies lasiocarpa*, *Ribes montigenum*, and *Achillea millefolium*. In Nevada, elevation range 9,400 to 10,600 feet amsl; in Utah, 7,500 to 10,400 feet amsl. Flowering late July to early August.	None.	No. Based on the species limited distribution geographic range, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001; UNPS 2006.
House Range primrose	*Primula cusickiana* var. *domensis*	BLM-UT	Range: Endemic to the House Ridge within the Notch Peak area in Millard County, Utah. Habitat: Limestone crevices. Elevation range and flowering period unknown.	None.	No. The species is endemic to the Notch Peak area which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2011; UNPS 2006.
Jones indigo-bush	*Psorothamnus polydenius* var. *jonesii (Psorothamnus nummularius)*	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Shadscale, mat-saltbush, ephedra, and galleta communities on the Blue Gate and Tununk members of the Mancos Shale Formation on sandy terrace gravels. Elevation range 4,200 to 4,900 feet amsl. Flowering late May to mid July.	Region II: Moderate. The species has a documented adjacent to the refined transmission corridor in Emery County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Grand counties, Utah.	Yes.	BLM 2010; UNPS 2006.
Smokethorn	*Psorothamnus spinosus*	NPS-Lake Mead NRA	Range: Known within the Sonoran Desert, within the southern part of California, Arizona, and Baja California. Habitat: Desert washes. Elevation range less than 1,300 feet amsl. Flowering June to July.	None.	No. Based on agency consultation and lack of suitable habitat parameters, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	Jepson Flora Project 2012; NPS 2012.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Persistent sepal yellowcress	*Rorippa calycina*	BLM-WY	Range: Restricted to the North Platte River drainage, and the Bighorn, Great Divide, Green River, and Wind River basins within Albany, Big Horn, Carbon, Fremont, Park, Sweetwater, and Washakie counties. Total population estimated at approx. 15,000 to 25,000 individuals. Habitat: Moist sandy to muddy banks of streams, stock ponds, and man-made reservoirs near the high water line, high plain swales that evaporate, and along creeks. Elevation range 3,660 to 6,800 feet amsl. Flowering late May to August (extending into October).	None.	No. Based on the deletion of Segment 10 (former Aelous Design Option), potentially suitable habitat for this species is no longer present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Carbon County, Wyoming.	WYNDD 2009.
Arizona willow	*Salix arizonica*	USFS-Dixie NF, USFS-Fishlake NF, USFS-Manti-LaSal NF	Range: Known within Iron, Kane, Sanpete, and Sevier counties, Utah; and also in Arizona, New Mexico, and possibly Colorado. Habitat: Riparian areas and wet meadows. Elevation at approx. 8,200 feet amsl. Flowering period unknown.	Region II: Moderate. The species has been documented approx. 16 miles north and south of the refined transmission corridor in Sanpete and Sevier counties, Utah. Based on the presence of suitable vegetation cover types, elevation range, and presence of riparian areas, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah within USFS-Fishlake NF.	Yes.	NatureServe 2012; UNPS 2006.
Death Valley sage	*Salvia funerea*	BLM-NV	Range: Known within Nye County, Nevada; and also in California. Habitat: Dry limestone cliffs, crevices, and adjacent wash gravels in deep sheltered canyons or on north-facing exposures, surrounded by zonal shadscale and creosote bush vegetation. Elevation range 2,600 to 3,500 feet amsl. Flowering in spring.	None.	No. The species is known within Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Clay reed-mustard	*Schoenocrambe argillacea*	FT (UT)	Range: Endemic to the Bookcliffs in Uintah County, Utah. Known populations are present from the west side of the Green River to the east side of Willow Creek. Habitat: Mixed desert shrub communities on generally north-facing slopes composed of clay soils rich with gypsum overlain with sandstone talus on shale substrates at the contact zone between the lower Uinta and upper Green River formations. Typically found in mixed desert shrub communities of shadscale, Indian ricegrass, and pygmy sagebrush. Elevation range 4,800 to 5,600 feet amsl. Flowering April to May.	Region II: High. The species has been documented within the refined transmission corridor in Uintah County, Utah. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah County, Utah.	Yes.	BLM 2010; USFWS 2012a, 1994a, 1992b; UDWR 2012; UNPS 2006.
Barneby reed-mustard	*Schoenocrambe barnebyi*	FE (UT)	Range: Endemic to Keesle Country of the San Rafael Swell and Capitol Reef National Park within Emery and Wayne counties, Utah. Total population estimated at approx. 2,000 individuals among 2 populations. Habitat: Sparsely vegetated mixed desert shrub communities, generally on north-facing slopes composed of red clay soils rich in selenium and gypsum, overlain with sandstone talus, which is derived primarily from the Moenkopi and sometimes from the Chinle and Carmel formations. Elevation range 5,400 to 6,889 feet amsl. Flowering April to May.	None.	No. The species is endemic to the Capitol Reef National Park and the San Rafael Swell which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; CPC 2010; USFWS 2012a, 1994a, 1992b; UDWR 2012; UNPS 2006.
Shrubby reed-mustard	*Schoenocrambe suffrutescens*	FE (UT)	Range: Endemic within the Hill Creek drainage, Willow Creek drainage, and Badland Cliffs within Duchesne and Uintah counties, Utah. Habitat: Shadscale, pygmy sagebrush, mountain mahogany, juniper, and other mixed desert shrub communities in calcareous shale of the Evacuation Creek member of the Green River Shale Formation. Elevation range 5,400 to 6,000 feet amsl. Flowering late May to June or July.	Region II: Moderate. The species has been documented approx. 1.5 miles south of the refined transmission corridor in Duchesne County, Utah, and approx. 6 miles south of the refined transmission corridor in Uintah County, Utah. Based on the proximity to endemic habitat and presence of potential habitat parameters, the species may be present within the within 1 mile of the alignment in Duchesne County, Utah.	Yes.	BLM 2010; USFWS 2012a, 1994; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Blaine pincushion	*Sclerocactus blainei*	BLM-NV	Range: Possible or probably Nevada endemic known within Nye County, Nevada. Habitat: Alkaline calcareous and volcanic gravelly-clay soils in open valley bottom areas in the shadscale and lower sagebrush zones. Elevation range 5,100 to 5,300 feet amsl. Flowering in late-spring.	Region III: Low. The species has been documented approx. 11 miles north of the refined transmission corridor in Lincoln County, Nevada. Potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Lincoln County, Nevada.	Yes.	NatureServe 2012; NNHP 2001.
Pariette cactus	*Sclerocactus brevispinus*	FT (UT)	Range: Known only from the Pariette Draw region along the Duchesne/Uintah County border, Utah. Habitat: Saline and alkaline soils in clay badlands. Elevation range 4,590 to 4,920 feet amsl. Flowering late April to May.	Low.	No. The species has been documented approx. 6 miles north of the refined transmission corridor on the Duchesne-Uintah counties, Utah border. However, based on the species limited distribution geographic range, it is unlikely the species would be found within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	BLM 2010; FNA 1994; NatureServe 2012; USFWS 2012a, 2010c; UNPS 2006.
Colorado hookless cactus	*Sclerocactus glaucus*	FT (CO)	Range: Known within Delta, Garfield, Mesa, and Montrose counties, Colorado. Habitat: Rocky hills, mesa slopes, and alluvial benches in desert shrub communities. Elevation range 4,500 to 6,000 feet amsl. Flowering April to May.	Region II: High. The species has been documented within the refined transmission corridor in Mesa County, Colorado. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Mesa and Garfield counties, Colorado.	Yes.	Spackman and Anderson 2002; USFWS 2012a, 2010d.
Great Basin fishhook cactus	*Sclerocactus pubispinus*	BLM-NV; NV State CY	Range: Known within Nevada along the easternmost edges of Elko and White Pine counties; Lincoln County (northeast of Panaca, Nevada); and also in northwest Utah between Box Elder and Beaver counties. Habitat: Rocky hillsides of woodland and upper desert mountains. Elevation range and flowering period unknown.	Low.	No. Based on the species limited geographic distribution, it is unlikely that the species would be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; Styles 2010.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Schlesser pincushion	*Sclerocactus schlesseri*	BLM-NV	Range: Possibly endemic within Lincoln County, Nevada (specifically known within Dry Lake Valley); and also in Utah. Habitat: Open, stable or stabilized, gravelly, sandy silt or silty clay soils derived from somewhat ashy and/or gypsiferous lacustrine sediments, on mesic microsites created and/or maintained by gentle north to east aspects, dense shrub and/or grass canopies, high clay and silt content of the soil, and/or cryptobiotic soil crusts, usually associated with such soil crusts in the shadscale zone with *Atriplex confertifolia, Gutierrezia sarothrae, Ericameria viscidiflora* var. *puberula, Krascheninnikovia lanata, Pleuraphis jamesii, Mentzelia albicaulis,* and *Mimulus parryi*. Elevation range 4,760 to 5,145 feet amsl. Flowering late spring.	Region III: Moderate. Although element record occurrences were not provided for this species, it is likely that this species and/or its associated habitat would be present within the refined transmission corridor, analysis area, or within 1 mile of the alignment in Lincoln County, Nevada based on the proximity to Dry Lake Valley.	Yes.	NNHP 2010; Styles 2010.
Uinta Basin hookless cactus	*Sclerocactus wetlandicus*	FT (UT)	Range: Known within Carbon, Duchesne, and Uintah counties, Utah. Habitat: Rocky hills, mesa slopes, and alluvial benches in desert shrub and pinyon-juniper woodland communities on river benches, valley slopes, and rolling hills, of the Duchesne River, Green River, and Uintah formations in dry, fine-textures soils overlain with cobbles and pebbles. Elevation range 4,500 to 6,600 feet amsl. Flowering April to late May.	Region II: High. The species has been documented within the refined transmission corridor in Uintah County, Utah; and adjacent to the refined transmission corridor in Duchesne County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne and Uintah counties, Utah.	Yes.	BLM 2010; USFWS 2012a, 2010e; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Wright fishhook cactus	*Sclerocactus wrightiae*	FE (UT)	Range: Endemic to Emery, Sevier, and Wayne counties, Utah. Habitat: Salt desert shrub and shrub/grass to juniper communities on the Mancos Shale, Curtis, Dakota, Morrison, Summerville, and Entrada formations, often associated with well-developed biological soil crusts. On the Mancos Shale associated with the Bluegate, Tununk, Emery, and Ferron members. Substrate typically gypsiferous or saline soil that range in texture from clays to sandy silts to fine sands. Elevation range 4,260 to 5,900 feet amsl. Flowering April to May.	Region II: Moderate. The species has been documented approx. 4 miles southeast of the refined transmission corridor in Emery County; and approx. 6 miles south of the refined transmission corridor in Sevier County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier and Emery counties, Utah.	Yes.	BLM 2010; USFWS 2012a, 1985b; UDWR 2012; UNPS 2006.
Beaver Mountain groundsel	*Senecio castoreus*	USFS-Fishlake NF	Range: Endemic to the Tushar Mountains in Beaver County, Utah. Habitat: Associated with *Polemonium, Trisetum, Festuca,* and *Arenaria* communities, often on windswept ridges or less commonly downward to the spruce-fir community on Tertiary igneous outcrops and gravel. Elevation range 11,000 to 12,700 feet amsl. Flowering July to September.	None.	No. The species occurs at a higher elevation and in very limited geographic range than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Beaver County, Utah.	UNPS 2006.
Podunk groundsel	*Senecio malmstenii*	USFS-Dixie NF	Range: Endemic to the Sevier-Markagunt and Paunsaugunt plateaus in Garfield, Iron, and Kane counties, Utah. Habitat: Western bristlecone pine, spruce-fir, and mixed conifer woodlands on steep talus slopes of the Claron Limestone Formation. Elevation range 9,500 to 10,500 feet amsl. Flowering June to August.	None.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment within Iron County, Utah.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Musinea groundsel	*Senecio musiniensis*	USFS-Manti LaSal NF	Range: Endemic to the Wasatch Plateau in Sanpete County, Utah. Habitat: Ridgetops on white Flagstaff Limestone barrens and talus slopes on Musinea Peak, and margins of the Wasatch Plateau. Elevation range 9,400 to 10,800 feet amsl. Flowering July to September.	Low.	No. The species has been documented approx. 21 miles southwest of the refined transmission corridor in Sanpete County, Utah; however, habitat model results indicate lack of potential habitat within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sanpete County, Utah.	NatureServe 2012; UNPS 2006.
Nachlinger catchfly	*Silene nachlingerae*	BLM-NV	Range: Known within Elko, Nye, and White Pine counties, Nevada. Habitat: Generally dry, exposed or somewhat sheltered carbonate (rarely quartzite) crevices in ridgeline outcrops, talus, or very rocky soils on or at the bases of steep slopes or cliffs, on all aspects but predominantly on northwesterly to northeasterly exposures, mainly in the subalpine conifer zone with sparse *Petrophytum aespitosum*, *Erigeron simplex*, *Pinus flexilis*, *P. longaeva*, *Artemisia arbuscula*, *Cercocarpus betuloides*, *Ericameria watsonii*, *Symphoricarpos oreophila*, *Leucopoa nevadensis*, *Jamesia tetrapetala*, and *Primula nevadensis*. Elevation range 7,160 to 11,250 feet amsl. Flowering August to September.	Low.	No. The species occurs at a higher elevation than that crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment on the border of Lincoln and White Pine counties, Nevada.	NNHP 2001.
Maguire campion	*Silene petersonii*	USFS-Dixie NF, USFS-Fishlake NF, USFS-Manti-LaSal NF	Range: Endemic to Iron, Kane, Garfield, Sanpete, and Sevier counties, Utah. Habitat: Ponderosa pine, aspen, and spruce-fir communities on Flagstaff Limestone and the Claron Formation. Elevation 7,000 to 11,300 feet amsl. Flowering July to August.	Region II: Moderate. The species has been documented approx. 12 miles southwest of the refined transmission corridor in Sanpete County, Utah; and approx. 13 miles north of the refined transmission corridor in Sevier County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and geologic formation, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sanpete and Sevier counties, Utah within the USFS-Manti-LaSal and USFS-Fishlake NFs.	Yes.	NatureServe 2012; UNPS 2006.

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Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
St. George blue-eyed grass	*Sisyrinchium radicatum*	BLM-NV	Range: Known from southern Nevada; and southwestern Utah, apparently restricted to the St. George-Las Vegas region. Habitat: Moist meadows or on streambanks associated with bluegrass, rush, and sea milkwort. Elevation range 1,970 to 4,265 feet amsl. Flowering late-spring to mid-summer.	Regions III and IV: Low. Although the species has not been documented within the study area, potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Clark County, Nevada.	Yes.	NatureServe 2012; FNA 1901.
Jones' globemallow	*Sphaeralcea caespitosa* var. *caespitosa*	BLM-UT	Range: Known within Beaver and Millard counties, Utah. Habitat: Mixed desert shrub and grass communities including shadscale, matchweed, rabbitbrush, winterfat, Indian ricegrass and galleta communities on the Sevy Dolomite Formation and on calcareous gravels. Elevation range 4,500 to 6,400 feet amsl. Flowering May to June and again in September.	Region III: Moderate. The species has been documented adjacent to the refined transmission corridor in Millard County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Millard and Beaver counties, Utah.	Yes.	UNPS 2006.
Railroad Valley globemallow	*Sphaeralcea caespitosa* var. *williamsiae*	BLM-NV	Range: Known within the Hot Creek-Railroad valleys watershed in Nye County, Nevada. Habitat: Mixed shrub, pinyon-juniper woodland, and grass community on Sevy Dolomite rock calcareous soil. Elevation range 5,000-6,505 feet amsl. Flowering May.	None.	No. The species is only known within Nye County, Nevada, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; NNHP 2001.
Gierisch mallow	*Sphaeralcea gierischii*	FE (UT)	Range: Endemic to Washington County, Utah; and also in Mohave County, Arizona. Habitat: Warm desert shrub communities, mainly on gypsiferous outcrops of the Harrisburg Member of the Kaibab Formation. Elevation range 2,475 to 2,760 feet amsl. Flowering mid April to early May.	Low.	No. Although the species has been documented approx. 22 miles southeast of the refined transmission corridor, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of species-specific associated geologic formations and elevation range within Washington County, Utah.	Federal Register 2012; USFWS 2012a; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Jane globemallow	*Sphaeralcea janeae*	BLM-UT	Range: Endemic to the Canyonlands section of Utah along the Colorado and Green rivers in Grand, Wayne, and San Juan counties, Utah. Habitat: Warm and salt desert shrub communities on the Shinarump and Moenkopi formations and the White Rim and Organ Rock members of the Cutler Formation. Elevation range 4,000 to 4,600 feet amsl. Flowering May to June.	None.	No. The species is only known to occur in association with the Shinarump, Moenkopi, and Cutler formations which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment in Grand County, Utah.	NatureServe 2012; UNPS 2006.
Psoralea globemallow	*Sphaeralcea psoraloides*	BLM-UT	Range: Endemic to the Colorado Plateau within Emery and Wayne counties, Utah. Habitat: Zuckia-ephedra, shadscale, *Eriogonum*, *Lepidium*, and pinyon-juniper woodland communities on saline and gypsiferous Mancos Shale, Buckhorn conglomerate, Curtis sandstone, Entrada siltstone, Carmel, and Kaibab Limestone. Elevation range 4,000 to 6,300 feet amsl. Flowering mid May to June.	Region II: Moderate. The species has been documented approx. 4 miles west of the refined transmission corridor in Emery County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	Yes.	BLM 2010; UNPS 2006.
Rocktansy	*Sphaeromeria capitata*	BLM-CO, USFS-Dixie NF	Range: Known within Moffat County, Colorado; disjunct onto the Utah Plateaus in Garfield County, Utah; and also in Wyoming and Montana. Habitat: Western bristlecone pine, ponderosa pine, and pinyon-juniper woodland communities on Cedar Breaks Limestone. General elevation range 4,920 to 7,875 feet amsl; Utah elevation range 7,700 to 7,800 feet amsl; and Colorado elevation range 7,500 to 7,900 feet amsl. Flowering May thru July (depending on state).	Low.	No. The species has been documented approx. 3.5 miles west of the refined transmission corridor in Moffat County, Colorado; however, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on the lack of suitable elevation range and soil substrates within Moffat County, Colorado.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Laramie false sagebrush	*Sphaeromeria simplex*	BLM-WY	Range: Regional endemic to the western foothills of the Laramie Range, Shirley Basin, and Shirley Mountains in Albany, Carbon, Converse, and Natrona counties, Wyoming. Total population estimated at approx. 860,000 individuals. Habitat: In cushion plant communities on rocky limestone soils on gentle slopes or rims of dry, rocky limestone-sandstone "pebble plains" in wind scoured openings. Surrounding vegetation communities typically are densely vegetated forest or shrubland communities. Elevation range 7,200 to 8,760 feet amsl. Flowering May to August.	None.	No. Based on the deletion of Segment 10 (former Aelous Design Option), potentially suitable habitat for this species is no longer present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Carbon County, Wyoming.	Handley and Heidel 2010; NatureServe 2012; WYNDD 2009.
Ute ladies'-tresses orchid[6]	*Spiranthes diluvialis*	FT (CO, UT, WY), BLM-NV; NV State CE	Range: Known within Lincoln and possibly White Pine counties, Nevada; and also in Colorado, potentially along the Yampa River; Idaho, Montana, Nebraska, Utah, and Wyoming. Habitat: An aquatic or wetland-dependent occupying moist to very wet, somewhat alkaline or calcareous native meadows near streams, springs, seeps, lake shores, or in abandoned stream meanders that still retain ample ground water. Elevation range 4,200 to 6,100 feet amsl. Flowering July to August.	Regions I, II, III: High. The species has been documented within the refined transmission corridor in Wasatch and Duchesne counties, Utah. Based on the results of the modeled habitat assessment, potential habitat for the species may be present both within the refined transmission corridor and the analysis area in Moffat County, Colorado; Duchesne, Juab, Uintah, Utah, and Wasatch counties, Utah; and Carbon County, Wyoming.	Yes.	BLM 2010; NatureServe 2012; NNHP 2001; USFWS 2012a, 1995c, 1992c; WYNDD 2009.
White River swertia	*Swertia gypsicola*	BLM-UT	Range: Endemic to the Great Basin in western Millard County, Utah; and also in Nevada. Habitat: Greasewood and shadscale dominated valley bottoms. Elevation at approx. 5,000 feet amsl. Flowering mid June to July.	Low.	No. Although potential habitat may be present based on the presence of suitable vegetation cover types, elevation range, and soil substrate, it is unlikely this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Thompson talinum	*Phemeranthus thompsonii*	BLM-UT	Range: Endemic to the Colorado Plateau in Emery County, Utah. Habitat: Pinyon-juniper and ponderosa pine communities in siliceous conglomeratic gravels. Elevation range at approx. 7,500 feet. Flowering mid July to August.	Region II: Moderate. The species has been documented approx. 1 mile north of the refined transmission corridor in Emery County, Utah. Based on the presence of suitable elevation range, vegetation cover types, and soil substrate, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery County, Utah.	Yes.	BLM 2010; UNPS 2006.
Cathedral Bluff meadow-rue	*Thalictrum heliophilum*	BLM-CO	Range: Limited to the Colorado River drainage in Garfield, Rio Blanco, and Mesa counties, Colorado. Habitat: Sparsely vegetated steep talus slopes and ridges of the Parachute Creek Member of the Green River Formation. Elevation range approx. 6,300-8,800 feet amsl. Flowering June to August.	Low.	No. Although the species has been documented approx. 21 miles east of the refined transmission corridor in Rio Blanco County, Colorado; and approx. 44 miles east of the refined transmission corridor in Garfield County, Colorado, it is unlikely that this species would occur within the refined transmission corridor, analysis area, and within 1 mile of the alignment based on agency consultation and the lack of suitable habitat parameters.	FNA 1983; NatureServe 2012.
Duchesne greenthread (Caespitose greenthread)	*Thelesperma caespitosum (Thelesperma caespitosa)*	USFS-Ashley NF, BLM-UT	Range: Endemic to Duchesne County, Utah; and Sweetwater County, Wyoming. Habitat: White shale slopes and ridges of the Green River Formation or in mountain shrub/pinyon-juniper woodland communities of the Uinta Formation. Elevation range 5,900 to 8,860 feet amsl. Flowering May to June.	Region II: Utah – High. The species has been documented within and adjacent to the USFS Ashley NF within the refined transmission corridor in Duchesne County, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Duchesne County, Utah on BLM and Ashley NF lands. Wyoming – Low.	Utah - Yes. Wyoming – No. Potential habitat for the species is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sweetwater County, Wyoming.	BLM 2010; NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Uinta greenthread	*Thelesperma pubescens*	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the foothills of the southern Green River Basin and northern Uinta Range in Uinta and Sweetwater counties, Wyoming; and also in northeast Utah. Habitat: Sparsely vegetated cushion plant and sagebrush grasslands communities on cobbly soils along the summit edges of relict surfaces that are now isolated mountains forming mesa-like mountains capped with Bishop Conglomerate. Elevation range 8,100 to 8,900 feet amsl. Flowering July to August.	None.	No. Potential habitat for the species is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NatureServe 2012; UNPS 2006; WYNDD 2009.
Bicknell thelesperma	*Thelesperma subnudum* var. *alpinum (Thelesperma pubescens)*	USFS-Dixie NF, USFS-Fishlake	Range: Endemic to Wayne County, Utah. Total population estimated at approx. 8,300 to 21,200 individuals. Habitat: Pinyon-juniper, bristlecone pine, mountain brush communities in the Navajo Sandstone and Carmel limestone formations. Elevation range 7,300 to 9,000 feet amsl. Flowering June to July.	None.	No. The species is endemic to Wayne County, Utah, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	USFS 1999.
Last Chance townsendia	*Townsendia aprica*	FT (UT)	Range: Endemic to Emery, Sevier, and Wayne counties, Utah. Habitat: Salt desert shrub and pinyon-juniper woodland communities on clay or clay silt soils of the Blue Gate member of the Mancos Shale. Elevation range 6,100 to 8,000 feet amsl. Flowering April to May.	Region II: Moderate. The species has been documented approx. 1 mile north of the refined transmission corridor in Sevier County, Utah; and approx. 5 miles south of the refined transmission corridor in Emery County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and geographic formations, potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Emery and Sevier counties, Utah.	Yes.	BLM 2010; USFWS 2012a, 1993b; UNPS 2006.
Sigurd townsendia (Sevier townsendia)	*Townsendia jonesii* var. *lutea*	BLM-UT, USFS-Fishlake NF	Range: Known within Juab, Sanpete, and Sevier counties, Utah. Habitat: Salt desert and mixed desert shrub and juniper sagebrush communities on Arapien shale and clays in volcanic rubble. Elevation range 5,500 to 6,300 feet amsl. Flowering May to June.	Region II: Moderate. The species has been documented adjacent to the refined transmission corridor in Juab and Sevier counties, Utah. Potential habitat for the species may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Sevier County, Utah. Based on species-specific habitat modeling, potential habitat may also be present in Sevier County within the Fishlake NF.	Yes.	NatureServe 2012; UNPS 2010.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Strigose Easter-daisy	*Townsendia strigosa*	BLM-CO	Range: Known within Moffat County, Colorado; Duchesne, and Uintah counties, Utah; and central western, southwestern, and south-central portions of Wyoming. Habitat: Habitat information is not available for this species.	Region I and II: Low. No known populations have been identified within or adjacent to the refined transmission corridor. Since habitat characteristics are unavailable for this species, it is unknown if potential habitat may be present within the refined transmission corridor, analysis area, or within 1 mile of the alignment. A conservative estimate was applied, assuming the presence of potential habitat within Moffat County, Colorado.	Yes.	NatureServe 2012.
Strigose townsendia	*Townsendia strigosa* var. *prolixa*	BLM-UT	Range: Known within the Chipeta Wells and Duchesne Valley area (also Evacuation Creek) in Uintah County, Utah. May also occur in Grand County, Utah and Sweetwater County, Wyoming. Habitat: Barren, rocky clay knolls. Elevation range and flowering period unknown.	Region II: Low. No known populations have been identified within or adjacent to the refined transmission corridor. Since habitat characteristics are unavailable for this species, it is unknown if potential habitat may be present within refined transmission corridor, analysis area, or within 1 mile of the alignment. A conservative estimate was applied, assuming the presence of potential habitat within Uintah County, Utah.	Yes.	BLM 2010.
Currant Summit clover	*Trifolium andinum* var. *podocephalum*	BLM-NV	Range: Endemic to the White Pine and Egan ranges within Lincoln and Nye counties, Nevada. Habitat: Crevices of volcanic or carbonate rock in the pinyon-juniper woodland zone. Elevation range 6,900 to 7,400 feet amsl. Flowering late May through early July.	None.	No. The species is endemic to the White Pine and Egan ranges which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Frisco clover	*Trifolium friscanum*	FC (UT); BLM-UT	Range: Known within the San Francisco and Beaver Lake mountains in Beaver County; and within the Tunnel Springs Range in Millard County, Utah. Habitat: Calcareous and volcanic gravels and limestone on relatively steep slopes in pinyon-juniper woodland often associated with mountain mahogany. Elevation range 6,900 to 7,300 feet amsl. Flowering June.	Low.	No. The species has been documented approx. 7 miles west of the refined transmission corridor in Beaver County, Utah; however, habitat model results indicate lack of potential habitat within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Beaver County, Utah.	NatureServe 2012; USFWS 2012a, 2011b; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project[1]

Common Name	Scientific Name	Status[2]	Range and Habitat Requirements	Potential for Occurrence Within the Refined Transmission Corridor[3]	Carried Forward in Detailed Analysis	References
Smith violet	*Viola frank-smithii*	USFS-UNK	Range: Endemic to Logan Canyon in Cache County, Utah. Habitat: Cracks, crevices, and holes in outcrops of limestone and dolomite, in humid, shady places. Elevation range 5,300 to 5,900 feet amsl. Flowering mid May to August.	None.	No. The species has been documented within Cache County, Utah, which is not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	UNPS 2006.
Rock violet	*Viola lithion*	BLM-NV	Range: In Nevada, known only from the White Pine and Pilot Ranges within Elko, Nye, and White Pine counties. Habitat: Seasonally wet crevices in steep carbonate or quartzite outcrops in shaded northeast-facing avalanche chutes and cirque headwalls in the subalpine conifer zone with *Symphoricarpos oreophilus, Ribes montigenum, Heuchera rubescens, Aquilegia scopulorum, Thalictrum fendleri, Pinus flexilis,* and *Populus tremuloides*. Elevation range 7,840 to 10,480 feet amsl. Flowering June to August.	None.	No. The species is endemic to the White Pine and Pilot ranges which are not crossed by the refined transmission corridor, analysis area, and within 1 mile of the alignment.	NNHP 2001.
Sterile yucca	*Yucca sterilis* (*Yucca harrimaniae* var. *sterilis*)	BLM-UT	Range: Endemic of the Uinta Basin restricted to Uintah and Duchesne counties, Utah. Habitat: Salt desert shrub, juniper, sagebrush, shadscale communities in sandy soils. Elevation range 4,790 to 5,800 feet amsl. Flowering period unknown.	Region II: Moderate. The species has been documented approx. 4 miles north of the refined transmission corridor in Uintah County, Utah; and approx. 9 miles north of the refined transmission corridor in Duchesne County, Utah. Based on the presence of associated vegetation cover types, soil substrate, and elevational range, potential habitat may be present within the refined transmission corridor, analysis area, and within 1 mile of the alignment in Uintah and Duchesne counties, Utah.	Yes.	BLM 2010; UNPS 2006.

[1] Based on county level range and distribution, only those Nevada BLM Sensitive Species with potential for occurrence within the counties crossed by the proposed Project were included as part of this analysis table.

[2] Status: FE-Federally Endangered Species; FT-Federally Threatened Species; FC-Federal Candidate Species; FP-Federal Proposed Species; BLM-BLM Sensitive Species; USFS-USFS Sensitive Species; NV State CE-NV State Critically Endangered; NV State CE#-NV State Recommended for Listing a Critically Endangered; NV State CY – NV State Protected as a Cacti, Yucca, or Christmas Tree

[3] Potential for Occurrence Within the Project Area: High-Documented occurrences and suitable habitat within the refined transmission corridor; Moderate-Documented occurrences adjacent to the refined transmission corridors and potential habitat parameters identified within the refined transmission corridor; Low-No documented occurrences; however, one or more potential habitat parameters identified within the refined transmission corridor; None-No documented occurrences, nor potential habitat parameters identified within the refined transmission corridors.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
INVERTEBRATES						
Big Dune aphodius scarab beetle	*Aphodius sp. 1*	BLM-NV	Range: The Big Dune aphodius scarab beetle is endemic to the Big Dune complex in Nye county, Nevada. Habitat: The species inhabits dunes with creosote bush, sandpaper plant, prickly poppy, and astragalus.	Region IV: None. The Big Dune complex is outside the Project potential disturbance area.	No.	BLM 2004; Digital-desert.com 2014
Big Dune miloderes weevil	*Miloderes sp. 1*	BLM - NV	Range: The Big Dune miloderes weevil is endemic to the Big Dune complex in Nye county, Nevada. Habitat: The species inhabits dunes with creosote bush, sandpaper plant, prickly poppy, and astragalus.	Region IV: None. The Big Dune complex is outside the Project potential disturbance area.	No.	BLM 2004; Digital-desert.com 2014
Eureka mountainsnail	*Oreohelix eurekensis*	BLM - UT; UT-SGCN	Range: The Eureka mountainsnail is endemic to Utah and occurs in six isolated localities, representing four widely separated populations in Juab, Utah, Duchesne, Tooele and Grand counties, Utah. Habitat: The species inhabits relatively open, 45-degree, south/southwest-facing slopes on broken limestone and loam substrate.	Region II: Moderate. The species occurs in suitable habitat in Duchesne, Juab, Grand, and Utah counties, Utah. It has been documented on the Juab/Utah county line, and in eastern Duchesne County, Utah. Suitable habitat could occur in the Project potential disturbance area.	Yes.	NatureServe 2010; UDWR 2010a.
Giuliani's Big Dune scarab beetle	*Pseudocotalpa giulianii*	BLM - NV	Range: The Giuliani's Big Dune scarab beetle is endemic to the Big Dune complex in Nye county, Nevada. Habitat: The species inhabits dunes with creosote bush, sandpaper plant, prickly poppy, and astragalus.	Region IV: None. The Big Dune complex is outside the Project potential disturbance area.	No.	BLM 2004; Digital-desert.com 2014

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Great Basin silverspot (Nokomis fritillary) butterfly	*Speyeria nokomis nokomis*	BLM - CO	Range: The Great Basin silverspot butterfly is extirpated from most of its former range in Colorado, Arizona, New Mexico, and Utah. It is currently known to occur in Duchesne County, Utah and Moffat County, Colorado. Habitat: The subspecies inhabits streamside meadows and open seepage areas in desert landscpes with an abundance of violets. Colonies of this butterfly are often isolated.	Regions I and II: Moderate. The subspecies occurs in Duchesne County, Utah. In Moffat County, Colorado, it has been documented along the Green River in Dinosaur National Monument. Suitable habitat could occur within the Project potential disturbance area.	Yes.	NatureServe 2010; Opler et al. 2009; Selby 2007.
Large Aegialian scarab beetle	*Aegialia magnifica*	BLM-NV	Range: The large Aegialian scarab beetle is endemic to the Big Dune complex in Nye county, Nevada. Habitat: The species inhabits dunes with creosote bush, sandpaper plant, prickly poppy, and astragalus.	Region IV: None. The Big Dune complex is outside the Project potential disturbance area.	No.	BLM 2004; Digital-desert.com 2014
MacNeill sooty wing skipper (MacNeill saltbush sootywing) butterfly	*Hesperopsis gracielae*	BLM – NV NV-S1	Range: The MacNeill sooty wing skipper occurs in California, Nevada, Arizona, Utah, and Mexico. The species is endemic to a section of the Colorado River from the Arizona-Nevada-Utah border, south into adjacent Baja California, and Mexico. It also occurs east along the Salt River in Arizona. Habitat: The species inhabits saltbush flats adjacent to rivers.	Region III: Moderate. The species could occur within the Project potential disturbance area in isolated colonies along the Muddy River in Clark County, Nevada.	Yes.	Hiatt and Boone 2003; NatureServe 2010.
Mojave gypsum bee	*Andrena balsamorhizae*	BLM – NV NV-S2	Range: The Mojave gypsum bee occurs in Clark County, Nevada. Habitat: The species occurs in the Mojave desert and is a silverleaf sunray obligate.	Regions III and IV: High. The species could occur within the Project potential disturbance area in gypsum soil areas of the Las Vegas Basin in Clark County, Nevada. Its obligate, silverleaf sunray, has also been documented within the Project potential disturbance area in Clark County, Nevada.	Yes.	Hiatt and Boone 2003; NatureServe 2010.
Mojave poppy bee	*Perdita meconis*	BLM – NV NV-S2	Range: The Mojave poppy bee occurs in southeastern California, southern Nevada, southwestern Utah, and northwestern Arizona. Habitat: The species occurs in the Mojave desert and is a poppy plant obligate.	Regions III and IV: High. The species could occur within the Project potential disturbance area in Clark County, Nevada. One of the obligate poppy species has been documented within the Project potential disturbance area in Clark County, Nevada.	Yes.	Hiatt and Boone 2003; NatureServe 2010.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Mono Basin Skipper (Railroad Valley skipper) butterfly	*Hesperia uncas giulianii*	BLM - NV	Range: The Mono Basin (Railroad Valley) skipper is endemic to Nevada. Habitat: The subspecies inhabits grasslands, sagebrush, and open woodlands.	Regions III and IV: High. The subspecies occurs in southern Nevada. Suitable habitat could be present within the Project potential disturbance area.	Yes.	NatureServe 2010; Opler et al. 2009.
Mount Charleston blue butterfly	*Icaricia shasta charlestonensis*	BLM - NV	Range: The Mount Charleston blue butterfly occurs only at high elevations of the Spring Mountains, approximately 25 miles west of Las Vegas in Clark County, Nevada. Habitat: The subspecies inhabits flat and open areas with exposed soil, rock, and short, widely spaced forbs and grasses above 8,200 feet amsl.	Region IV: None. The Spring Mountains are outside the Project potential disturbance area.	No.	USFWS 2014
Northern Mojave blue (Mojave blue) butterfly	*Euphilotes mojave virginensis*	BLM – NV NV-S1	Range: The northern Mojave blue butterfly occurs in Arizona, Nevada, and Utah. Habitat: The species inhabits Mojave desert habitat in washes and sandy areas.	Regions III and IV: High. The subspecies occurs in southern Nevada. Suitable habitat could be present in the Project potential disturbance area.	Yes.	NatureServe 2010; Opler et al. 2009.
REPTILES						
Banded Gila monster	*Heloderma suspectum cinctum*	NV-SCP	Range: The banded Gila monster occurs in Clark, Nye, and Lincoln counties, Nevada. Habitat: The subspecies occurs in rocky desert habitats including desert grassland, Mojave and Sonoran desert scrub, and thorn scrub. It is sometimes found in oak or pine-oak woodlands.	Regions III and IV: High.The subspecies has been documented within the Project potential disturbance area in Region III, and in Clark and Lincoln counties, Nevada.	Yes.	NatureServe 2010; NDOW 2007; Wildlife Action Plan Team 2012.
Chuckwalla	*Sauromalus ater*	BLM – UT, NV; UT-SGCN - Tier II	Range: The chuckwalla occurs throughout the Mojave Desert region of Nevada, in southern Washington County, eastern Kane and Garfield counties, and southeastern San Juan County, Utah. Habitat: The species occurs in rocky desert habitats.	Regions III and IV: High. The species has been documented within the Project potential disturbance area in Region IV. It is also known to occur in Washington County, Utah and Lincoln County, Nevada.	Yes.	NDOW 2007; Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Corn snake	*Elaphe guttata*	BLM - UT; UT-SGCN - Tier II	Range: The corn snake is primarily found east of the continental divide in North America. Isolated populations occur in Utah. Habitat: The species occurs in riparian and mixed woodland habitats with a permanent source of water.	Regions I, II and III: Moderate. The species is known to occur along the Colorado and Green rivers, from Moab, in Grand County, Utah, north to Dinosaur National Monument in Uintah County, Utah.	Yes.	Stebbins 2003; Sutter et al. 2005; Bosworth 2003.
Desert glossy snake	*Arizona elegans eburnata*	BLM - NV	Range: The desert glossy snake occurs in southern Nevada, northwestern Arizona, extreme southwestern Utah,eastern California, and Baja California. Habitat: The subspecies inhabits barren sandy desert, arid scrub, and rocky washes.	Region IV: Moderate. Suitable habitat occurs within the Project potential disturbance area in Nevada.	Yes.	CaliforniaHerps.com 2012.
Mojave Desert sidewinder	*Crotalus cerastes cerastes*	BLM - NV	Range: The Mojave desert sidewinder occurs in the Mojave Desert of southern California and southern Nevada. Habitat: The subspecies inhabits areas of wind-blown sand, especially those with vegetation such as creosote bush.	Regions III and IV: Moderate. Suitable habitat occurs within the Project potential disturbance area in Utah and Nevada.	Yes.	The Reptile Database 2014
Mojave shovel-nosed snake	*Chionactis occipitalis occipitallis*	BLM - NV	Range: The Mojave shovel-nosed snake occurs within the Mojave Desert of southern Nevada. Habitat: The subspecies occurs within sparsely vegetated desert habitat consisting of mesquite-creosote bush, desert grasses, and cactus. Habitat components also include rocky slopes, dunes, washes, and sandy flats, but preferred habitat is flat areas with sandy soils.	Region IV: Moderate. Suitable habitat occurs within the Project potential disturbance area in Nevada.	Yes.	Wildlife Action Plan Team 2012.
Nevada shovel-nosed snake	*Chionactis occipitalis talpina*	BLM - NV	Range: The Nevada shovel-nosed snake occurs from east-central California to southwestern Nevada. Habitat: The subspecies inhabits dry desert habitats with loose sand and little vegetation.	Region IV: Moderate. Suitable habitat occurs within the Project potential disturbance area in Nevada.	Yes.	CaliforniaHerps.com 2014

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Desert iguana	*Dipsosaurus dorsalis*	BLM - UT; UT-SGCN - Tier II	Range: The desert iguana occurs in the Mojave Desert of California and Nevada, the Great Basin Desert in Utah and Arizona, and the deserts of Baja California and Mexico. Habitat: The species inhabits creosote desert with loose sands interspersed with firm ground and scattered rocks.	Regions III and IV: High. The species has been documented within the refined transmission line corridor in Region IV. It occurs in Clark and Lincoln counties, Nevada and Washington County, Utah.	Yes.	Wildlife Action Plan Team 2012; NDOW 2007; SDNHM 2009; Sutter et al. 2005.
Desert night lizard	*Xantusia vigilis*	BLM - UT; UT-SGCN - Tier II	Range: The desert night lizard occurs in the Mojave Desert. Habitat: The species inhabits arid and semiarid granite outcrops and rocky areas. Habitat typically consists of yucca, agave, Joshua trees, pinyon-juniper woodland, and desert shrub.	Regions III and IV: High. The species has been documented within the Project potential disturbance area in Regions III and IV. It occurs in Washington County, Utah, and Clark and Lincoln counties, Nevada.	Yes.	Wildlife Action Plan Team 2012; Bosworth 2003; Sutter et al. 2005.
Desert tortoise	*Gopherus agassizii*	FT; BLM - UT; UT-SGCN - Tier I; NV-T	Range: The desert tortoise occurs in the Mojave and Sonoran deserts. Habitat: The species occurs in a variety of habitats, including sandy flats, rocky foothills, alluvial fans, washes, and canyons with suitable soils for burrowing. Vegetative habitat typically consists of creosote bush and white bursage.	Regions III and IV: High. The species has been documented within the Project refined transmission line corridor in Regions III and IV. It occurs in Washington County, Utah and Lincoln and Clark counties, Nevada. The Project would cross USFWS critical habitat in Washington County, Utah and Clark and Lincoln counties, Nevada.	Yes.	Germano et al. 1994; NatureServe 2010; Sutter et al. 2005; USFWS 2008a, USFWS 1994.
Long-nosed leopard lizard	*Gambelia wislizenii*	BLM - CO	Range: The long-nosed leopard lizard occurs in the western United States from Oregon and Idaho to northern Mexico. Habitat: This species inhabits a variety of sparsely distributed vegetation communities in desert flats and lower foothills.	Regions II, III, and IV: High. The species has been documented within the Project refined transmission line corridor in Regions II, III, and IV. It occurs in Clark and Lincoln counties, Nevada, western Colorado, and western Utah.	Yes.	Colorado Herpetological Society No Date; Wildlife Action Plan Team 2012; SDNHM 2009.
Midget faded rattlesnake	*Crotalus viridis concolor*	BLM – CO	Range: The midget faded rattlesnake occurs in southwestern Wyoming, northeastern Utah, and northwestern Colorado. Habitat: This subspecies inhabits rock outcrops in sagebrush desert, pinyon-juniper woodland, greasewood flat, saltbush shrubland, and desert shrubland communities.	Regions I and II: Moderate. The subspecies has been documented in Sweetwater County, Wyoming. It also occurs in the lower Green River Valley from Green River and Rock Springs, Wyoming, to the Utah-Wyoming border. It also occurs in northeastern Utah and northwestern Colorado.	Yes.	WGFD 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Utah milk snake	*Lampropeltis triangulum taylori*	BLM - CO	Range: The Utah milk snake occurs in Utah, from the southwestern part of the state to the southern part of the Wasatch Mountains and east through the Uinta Mountains and the Uinta Basin. Habitat: The subspecies occurs in a variety of habitats including open forests, shrubland, and sagebrush, with a grass understory.	Region II: High. Suitable habitat occurs within the Project potential disturbance area in Duchesne, Grand, Sanpete, and Sevier counties, Utah.	Yes.	Bosworth 2003.
Mojave rattlesnake	*Crotalus scutulatus*	BLM - UT; UT-SGCN - Tier II	Range: The Mojave rattlesnake occurs in Clark, southern Nye, and southern Lincoln counties, Nevada. In Utah, the species occurs only in the Mojave Desert region of southwestern Washington County. Habitat: The species inhabits areas with Joshua trees, creosote bush, burrow brush, and cholla cactus, with a rocky substrate.	Regions III and IV: High. The species has been documented within the Project refined transmission line corridor in Clark County, Nevada. It also occurs in Washington County, Utah.	Yes.	Heindl No Date; Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003.
Sidewinder	*Crotalus cerastes*	BLM - UT; UT-SGCN - Tier II	Range: The sidewinder occurs in the Mojave and Sonoran deserts. Habitat: The species occurs in open sandy desert terrain with fine windblown sand, desert flats with sandy washes, or sand dunes sparsely vegetated with creosote bush or mesquite.	Regions III and IV: High. The species has been documented within the Project refined transmission line corrodor In Region IV. It occurs in Lincoln and Clark counties, Nevada and Washington County, Utah.	Yes.	AGFD 2006; NatureServe 2010; Wildlife Action Plan Team 2012; SDNHM 2009; Sutter et al. 2005.
Smooth greensnake	*Opheodrys vernalis*	BLM - UT; UT-SGCN - Tier II	Range: The smooth greensnake occurs from southwestern and south-central Wyoming to Utah, Idaho, and New Mexico. Habitat: The species inhabits the foothill and montane zones, in riparian communities in coniferous, deciduous, and subalpine forests. Meadows, grasslands, and wetlands may also be utilized.	Regions I and II: High. The species has been documented within the Project potential disturbance area in Utah County, Utah. It has been documented in isolated locations in the mountains of central and eastern Utah, including the Wasatch, Uintah, Abajo, and La Sal mountains, and the East Tavaputs Plateau. It also occurs in Carbon County, Wyoming.	Yes.	Colorado Herpetological Society No Date; Sutter et al. 2005; Bosworth 2003; WGFD 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Speckled rattlesnake	*Crotalus mitchellii*	BLM - UT; UT-SGCN - Tier II	Range: The speckled rattlesnake occurs in the Mojave and Sonoran deserts. Habitat: The species inhabits rocky desert terrain and desert scrub communities, including creosote bush and bursage.	Regions III and IV: High. The species has been documented within the Project potential disturbance area in Clark County, Nevada. It has been documented within 5 miles of the refined transmission line corridor in Washington County, Utah. It is also known to occur in extreme southern Lincoln County, Nevada.	Yes.	NatureServe 2010; Wildlife Action Plan Team 2012; SDNHM 2009; Sutter et al. 2005; Bosworth 2003.
Western banded gecko	*Coleonyx variegates*	BLM - UT; UT-SGCN - Tier II	Range: The western banded gecko occurs in the Mojave and Sonoran deserts. Habitat: The species inhabits open areas, often near rocks, in creosote scrub and desert scrub communities.	Regions III and IV: High. The species has been documented within the Project potential disturbance area in Clark County, Nevada. It has also been documented within 5 miles of the refined transmission line corridor in Washington County, Utah.	Yes.	NatureServe 2010; Wildlife Action Plan Team 2012; NDOW 2007; SDNHM 2009; Sutter et al. 2005; Bosworth 2003.
Western threadsnake (blindsnake)	*Leptotyphlops humilis*	BLM - UT; UT-SGCN - Tier II	Range: The western threadsnake occurs from southwestern Utah and southern Nevada through southern California, Arizona, New Mexico, Texas, and parts of Mexico. Habitat: The species occurs in a variety of habitats, including deserts, desert-grasslands, shrub covered mountain slopes including rocky terrain, washes near stream channels, riparian, and spring areas.	Regions III and IV: Low. The species occurs in southwestern Washington County, Utah, and in Clark and Lincoln counties, Nevada.	Yes.	BLM 2007; NatureServe 2010; Sutter et al. 2005; Bosworth 2003.
Zebra-tailed lizard	*Callisaurus draconoides*	BLM - UT; UT-SGCN - Tier II	Range: The zebra-tailed lizard occurs throughout the desert southwest in Arizona, California, Nevada, New Mexico, and Utah. Habitat: The species inhabits open desert areas on firm soil, with sparse creosote bush and blackrush vegetation. It sometimes occurs on rocky, shady, leaf-litter substrates.	Regions III and IV: High. The species has been documented within the Project potential disturbance area in Clark County, Nevada. It has been documented within 1 mile of the refined transmission line corridor in Washington County, Utah. It also occurs in Lincoln County, Nevada.	Yes.	BLM 2007; NatureServe 2010; NDOW 2007; Sutter et al. 2005; Bosworth 2003.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
BIRDS						
American white pelican	*Pelecanus erythrorhynchos*	BLM – CO, UT; UT-SGCN - Tier II; MBTA	Range: The American white pelican breeds in widely distributed island colonies from Canada to northeastern California, Utah, Nevada, Wyoming, and Colorado. Habitat: The American white pelican breeds on islands in large bodies of water and forages in marshes, lakes, and rivers. The species is a colonial nester and constructs a scrape nest on flat, open ground, near water.	Regions I and II: High. The species has been documented within the Project potential disturbance area in Millard County, Utah. It has also been documented within 5 miles of the refined transmission line corridor in Iron, Juab, Millard, Sevier, Uintah, and Washington counties, Utah. A breeding colony has been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming.	Yes.	Floyd et al. 2007; Kingery 1998; Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003; WGFD 2005.
White-faced ibis	*Plegadis chihi*	BLM – WY, CO; WY-SGCN Tier II; MBTA	Range: The white-faced ibis nests from central Mexico, coastal Texas and Louisiana, and throughout the Great Basin. Isolated colonies exist in Alberta, New Mexico, California, Montana, North Dakota, Iowa, Kansas, and South America. Habitat: The white-faced ibis breeds in tall emergent vegetation growing as “islands”, surrounded by water that is at least 18 inches deep.The species forages in wet hay meadows and flooded agricultural croplands, marshes, shallow ponds, lakes, and reservoirs. It constructs a nest of emergent vegetation on floating mats in bulrushes, cattails, reeds, or in low trees.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon County, Wyoming. It has also been documented within 5 miles of the refined transmission line corridor in Sweetwater County, Wyoming. Breeding colonies may exist in northwestern Colorado and in Clark County, Nevada.	Yes.	Floyd et al. 2007; Kingery 1998; Wildlife Action Plan Team 2012; Ryder and Manry 1994; WGFD 2005.
California condor	*Gymnogyps californianus*	FE; EXP/NE-UT; UT-SGCN - Tier I; MBTA	Range: The California condor occurs in California, Arizona, and southern Utah. Habitat: The California condor breeds and forages in rugged mountains. It nests on cliffs, in caves, or in cavities in giant sequoias. The species constructs a nest of coarse gravel, with a small amount of leaves and twigs.	Region III: High. The species has been documented within the refined transmission line corridor in Iron County, Utah. The reintroduced population in northern Arizona occurs outside the refined transmission line corridor. However, condors regularly forage, roost, and may nest in southern Utah; therefore, they may occur within the refined transmission line corridor.	Yes.	AGFD 2008; Ehrlich et al. 1988; Snyder and Rea 1998; Sutter et al. 2005; Bosworth 2003.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Trumpeter swan	*Cygnus buccinator*	BLM – WY; WY-SGCN - Tier II; MBTA	Range: The trumpeter swan occurs locally from Alaska south to Oregon and east to Michigan. Habitat: The trumpeter swan breeds in areas with stable, quiet, and shallow waters where small islands, muskrat lodges, or dense emergent vegetation provide nesting and resting habitat. It forages in shallow marshes, ponds, lakes, and river oxbows with nutrient-rich waters, and dense aquatic plants and invertebrates.The species constructs a nest of aquatic and emergent vegetation, often on a muskrat lodge, surrounded by water.	Region I: High. The species has been documented within the Project potential disturbance area in Sweetwater County, Wyoming.	Yes.	Ehrlich et al. 1988; Floyd et al. 2005; WGFD 2005.
Barrow's goldeneye	*Bucephala islandica*	BLM – CO; MBTA	Range: The Barrow's goldeneye breeds in the western mountains of North America, from Alaska to central California. Habitat: The Barrow's goldeneye breeds near densely vegetated waterbodies with abundant aquatic vegetationand forages in open waterbodies. The species nests in cavities, usually in dead trees close to cold-water lakes, pools, or rivers and exhibits high nest fidelity.	Region I: Low. The species is a confirmed breeder in Sweetwater and Carbon counties, Wyoming.	Yes.	Ehrlich et al. 1988; Kingery 1998; WGFD 2005.
Bald eagle	*Haliaeetus leucocephalus*	BLM – WY, UT; USFS; CO-T; UT SGCN - Tier I; NV-E; WY SGCN - Tier I; BGEPA; MBTA	Range: The bald eagle occurs throughout the United States and Canada, south into central Mexico. Habitat: The bald eagle nests and winters along waterbodies in mature riparian woodlands.The species breeds in forested habitat near large lakes, reservoirs, and rivers with adequate prey and large, old cottonwood or conifer trees for nesting. The bald eagle constructs a large stick nest, and exhibits high nest fidelity.	Regions I, II, III, and IV: High. This species occurs in suitable habitat throughout the special status wildlife analysis area.	Yes.	Floyd et al. 2007; Kingery 1998; Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003; WGFD 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Northern goshawk	*Accipiter gentilis*	BLM – WY, CO, UT; USFS; UT SGCN – Tier I; NV-SCP; WY SGCN – Tier I	Range: The northern goshawk occurs in Alaska, Canada, and south through the southern Rocky Mountains and Mexico. Habitat: The species breeds and forages in mixed conifer forest and mature aspen stands with tall trees, intermediate canopy coverage for nesting, and small open areas for foraging. It constructs a stick and twig nest on a large horizontal limb, usually against or near the trunk.	Regions I and II: High. The species could occur within the Project potential disturbance area in Sweetwater County, Wyoming and in Emery and Millard counties, Utah. It has been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming; Garfield and Rio Blanco counties, Colorado; in Duchesne, Emery, Millard, Sanpete, Sevier, Uintah, Utah, and Wasatch counties, Utah; and in Lincoln County, Nevada.	Yes.	Floyd et al. 2007; Johnsgard 1990; Kingery 1998; Wildlife Action Plan Team 2012; Sutter et al. 2005; WGFD 2005.
Swainson's hawk	*Buteo swainsoni*	BLM – NV; MBTA	Range: The Swainson's hawk breeds in western North America, from Alaska to northern Mexico, and east to Oklahoma and Iowa. The species' range includes the wildlife analysis area. Habitat: The Swainson's hawk breeds and forages in arid grasslands, desert, and agricultural areas with scattered trees and shrubs. The species constructs a stick nest in trees and exhibits moderate nest fidelity.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Utah. Suitable habitat is present throughout the special status wildlife analysis area.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Johnsgard 1990; Kingery 1998; Bosworth 2003; WGFD 2005.
Ferruginous hawk	*Buteo regalis*	BLM – WY, CO, UT; UT SGCN - Tier II; WY SGCN -Tier I; MBTA	Range: The ferruginous hawk occurs in Canada, eighteen western and central states, and Mexico. Habitat: The ferruginous hawk breeds in semiarid open country, primarily grasslands, basin prairie shrublands, and badlands, typically near prairie dog colonies. It requires large tracts of relatively undisturbed rangeland for foraging habitat. The species constructs a large stick nest on rock outcrops, knolls, cutbanks, cliff ledges, or trees, and exhibits high nest fidelity.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming; in Beaver, Duchesne, Emery, Grand, Iron, Juab, Millard, Uintah, and Washington counties, Utah; and Lincoln County, Nevada. Suitable habitat occurs throughout the special status wildlife analysis area.	Yes.	Floyd et al. 2007; Kingery 1998; NatureServe 2010; Plan Team2012; Sutter et al. 2005; Bosworth 2003; WGFD 2005.
Golden eagle	*Aquila chrysaetos*	BLM – NV; CO – SGCN; NV – SCP; BGEPA; MBTA	Range: The golden eagle occurs throughout North America, from Alaska to central Mexico. Habitat: The golden eagle breeds and forages in a variety of habitats, including large expanses of grasslands, sagebrush, agricultural lands, and tundra. The species constructs a large stick nest on cliffs or in large trees, and exhibits high nest fidelity.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming, and in White Pine and Lincoln counties, Nevada. Suitable habitat occurs throughout the special status wildlife analysis area.	Yes.	Floyd et al. 2007; Kingery 1998; Kochert et al. 2002.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Peregrine falcon	*Falco peregrinus*	BLM – WY; USFS; CO-SGCN; NV-E; UT SGCN – Tier III; WY SGCN - Tier II; MBTA	Range: The peregrine falcon occurs throughout most of North America. Habitat: The peregrine falcon breeds and forages in a variety of open habitats, including woodlands, forests, shrub-steppe, grasslands, marshes, and riparian habitats. The species nests on cliffs and rarely on tall buildings near habitats with abundant prey. It constructs a well-rounded scrape nest of accumulated debris on a ledge.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Sweetwater County, Wyoming; Uintah County, Utah; and Clark County, Nevada. It also has been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming, and in Utah (Duchesne, Emery, Sevier, and Washington counties).	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Johnsgard 1990; Kingery 1998; NDOW 2007; Bosworth 2003; WGFD 2005.
Greater sage-grouse	*Centrocercus urophasianus*	FC; BLM – WY, CO, UT; USFS; CO-SGCN; UT SGCN - Tier II; NV-SCP; WY SGCN - Tier I	Range: The greater sage-grouse is found throughout the western United States. Habitat: The greater sage-grouse breeds and forages in sagebrush grasslands. Leks are located in open areas (e.g., ridges, knolls, dry lake beds, burned areas) in close proximity to taller sagebrush, which is used as escape cover. Most nests are located under sagebrush plants, typically within 4 miles of the lek. Brooding habitat consists of grassy areas near sagebrush. Winter habitat consists of south and east facing slopes with minimal snow cover.	Regions I, II, and III: High. Active leks occur within the Project potential disturbance area in Wyoming, Colorado, and Utah. Suitable nesting, brooding, and wintering habitat also occurs within the Project potential disturbance area in these states. The Project potential disturbance area includes greater sage-grouse core habitat areas in Wyoming.	Yes.	Connelly et al. 2004, 2000; Floyd et al. 2007; Kingery 1998; Sutter et al. 2005.
Gunnison sage-grouse	*Centrocercus minimus*	FT; BLM – CO, UT; CO - SGCN; UT SGCN - Tier I	Range: The Gunnison sage-grouse occurs in isolated locations in southwestern Colorado and southeastern Utah. Habitat: The Gunnson sage-grouse breeds and forages in sagebrush grasslands. Leks are located in open areas (e.g., ridges, knolls, dry lake beds, burned areas) in close proximity to tall sagebrush. Nests are generally located under sagebrush plants within 4 miles of the lek. Brooding habitat consists of grassy areas near sagebrush. Winter habitat consists of south and east facing slopes with minimal snow cover.	None.	No. The study area occurs outside the known geographic range of this species.	Connelly et al. 2004, 2000; Floyd et al. 2007; Bosworth 2003.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Columbian sharp-tailed grouse	*Tympanuchus phasianellus columbianus*	BLM – WY, CO; USFS; CO – SGCN; NV – SCP; UT SGCN - Tier II; WY SGCN - Tier II	Range: The Columbian sharp-tailed grouse occurs locally from Canada, south to Nevada and east to Colorado. It has been extirpated from Oregon, California, and Nevada. Habitat: The Columbian sharp-tailed grouse inhabits mountain-foothill shrub communities, sagebrush, grassland, and riparian habitats. Leks are located in flat areas with low, sparse vegetation. Nests typically occur within 0.6 mile of the lek area.	Regions I and II: Low. The subspecies occurs in suitable habitat in isolated locations in south-central Wyoming and northwestern Colorado.	Yes.	Kingery 1998; Sutter et al. 2005; WGFD 2005.
Yuma clapper rail	*Rallus longirostris yumanensis*	FE; BLM-NV; NV-E; MBTA	Range: The Yuma clapper rail was formerly restricted to an area near Yuma, Arizona, but has since expanded its range. Over 70 percent of the breeding population winters along the lower Colorado River. Habitat: The Yuma clapper rail breeds and forages in freshwater marshes with dense vegetation exceeding 16 inches in height, and water depth of 12 inches or less. Important habitat components include pond openings, flowing channels, and emergent soils. The species constructs a nest of reeds, aquatic vegetation, and grass in a tussock or clumped vegetation.	Regions III and IV: High. The Yuma clapper rail has been documented within the Project potential disturbance area in Clark County, Nevada. The subspecies potentially occurs only in the far southern limit of the Yuma clapper rail analysis area in southern Nevada, along the Muddy and Virgin rivers and at the Ash Meadows National Wildlife Refuge. It is also suspected to occur at the Pahranagat National Wildlife Refuge and the Las Vegas Wash.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; NatureServe 2010; Rosenberg et al. 1991; Todd 1986.
Whooping crane	*Grus americana*	FE; CO-E; UT SGCN - Tier I; MBTA	Range: Wild populations of whooping cranes migrate from their wintering habitat in southern Texas, north through Oklahoma, Nebraska, South Dakota, North Dakota and Montana to their nesting habitat in Canada. A non-migratory population also occurs in Florida. Habitat: The whooping crane does not breed in the wildlife analysis area. Migrants roost on submerged river sandbars and forage in mudflats around reservoirs and in agricultural areas.	None. The occurrence of this species within the Project potential disturbance area would be limited to accidental migrants from the Aransas-Wood Buffalo population. The Rocky Mountain experimental population is extinct.	Yes. The species is included in analysis because of the water depletion evaluation requirement in the Platte River Basin.	CDOW 2009a; Ehrlich et al. 1988; Sutter et al. 2005; USDOS 2008; USFWS 2004b.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Western snowy plover	*Charadrius alexandrinus nivosus*	BLM – CO; CO – SGCN; NV-SCP; MBTA	Range: The western snowy plover occurs primarily along the western coast of the U.S. The subspecies breeds in Churchill, Elko, Eureka, Humboldt, Lyon, Mineral, Nye, Pershing, Washoe, and White Pine Counties, Nevada.It is considered a migrant throughout the state. Habitat: The western snowy plover breeds and forages on alkali playas near large standing pools of shallow water. Artesian wells and springs that spill water onto the dry playas are also utilized in times of drought. Nests are located on recently exposed alkaline flats.	Region IV: Moderate. Suitable playa habitat is within the Project potential disturbance area.	Yes.	Wildlife Action Plan Team 2012.
Piping plover	*Charadrius melodus*	FT; CO-T; MBTA	Range: The northern Great Plains population of the piping plover occurs from Canada, south along major prairie rivers, including the Platte River system, and on lake shores to Colorado. Habitat: The piping plover breeds and forages on sparsely vegetated, sandy lakeshore beaches, sandbars within riverbeds, and on lake shores.The species constructs a scrape nest in sand or gravel.	None. It is unlikely that nesting piping plovers would be present within the special status wildlife analysis area.	Yes. The species is included because of the water depletion evaluation requirement in the Platte River Basin.	CPW 2010a; USDOS 2008; USFWS 2004a.
Mountain plover	*Chardrius montanus*	BLM – WY, CO, UT; USFS; CO – SGCN; UT SGCN - Tier III; WY SGCN - Tier I; MBTA	Range: The mountain plover occurs from south-central Canada to Texas. Habitat: The mountain plover breeds and forages in flat, short-grass prairie habitat and fallow agricultural fields with sparse vegetation. The species constructs a ground nest of cow manure chips, grass, and roots.	Regions I and II: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming. It has been documented within 5 miles of the refined transmission line corridor in Grand County, Utah. Historic records also exist for the mountain plover in Duchesne and Uintah counties, Utah.	Yes.	Ehrlich et al. 1988; NatureServe 2010; Bosworth 2003; WGFD 2005; WYNDD 2010.
Long-billed curlew	*Numenius americanus*	BLM – WY, CO, UT; CO – SGCN; NV-SCP; UT SGCN - Tier II; WY SGCN -Tier II; MBTA	Range: The long-billed curlew occurs from southern Canada throughout most of the western United States. Habitat: The long-billed curlew breeds and forages in a variety of grassland habitats including moist meadow grasslands, agricultural areas, and dry prairie uplands, usually near water. The species nests in grass less than 12 inches tall, with bare ground, shade, abundant invertebrate prey.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon County, Wyoming and Juab, Millard, and Uintah counties, Utah. It also has been documented within 5 miles of the refined transmission line corridor in Beaver, Grand, and Iron counties, Utah.	Yes.	Floyd et al. 2007; Kingery 1998; NatureServe 2010; Sutter et al. 2005; Bosworth 2003; WGFD 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Interior least tern	*Sternula antillarum*	FE; CO-SE; MBTA	Range: The interior least tern occurs along rivers and lake shores throughout the interior United States from Montana to Texas and New Mexico to Louisiana. Habitat: The interior least tern breeds and forages on barren or sparsely vegetated sandbars adjacent to waterbodies. The species nests in variable-sized colonies on sandy or pebbly, sparsely vegetated islands or shorelines.	None. It is unlikely that nesting interior least terns would be present within the special status wildlife analysis area.	Yes. The species is included in analyses because of the water depletion evaluation requirement in the Platte River Basin.	CDOW 2009b; USDOS 2008; USFWS 2009.
Black tern	*Chlidonias niger*	BLM – CO, NV; NV-SCP MBTA	Range: The black tern occurs locally in Canada and the northern two-thirds of the United States. Habitat: The black tern breeds in large marshes, usually greater than 50 acres, and forages in marshes and aquatic areas. The species nests in small, loose colonies and constructs a floating nest of dead rushes in marshes, or on grass tufts in wetlands.	Regions I and II: High. Breeding colonies of this species have been documented within the Project potential disturbance area in Carbon County, Wyoming and within 5 miles of the Project potential disturbance area in Sweetwater County, Wyoming. The species has been documented within 5 miles of the refined transmission line corridor in Uintah County, Utah. Suitable habitat occurs at Pelican Lake, and on sandbars in the Green River in Utah.	Yes.	Kingery 1998; Bosworth 2003.
Western yellow-billed cuckoo	*Coccyzus americanus*	FT; BLM – WY, CO, UT, NV; CO-SGCN; NV-SCP; UT SGCN - Tier I; WY SGCN - Tier III; MBTA	Range: The western yellow-billed cuckoo occurs west of the continental divide in North America and in the Rio Grande Basin. Habitat: The western yellow-billed cuckoo breeds and forages in dense woodlands along riparian corridors in otherwise arid areas. The species requires a multi-storied canopy, and dense, shrubby vegetation, adequate invertebrate prey, cover, and water. It constructs a twig nest, in a shrub.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Utah County, Utah. It also has been documented within 5 miles of the refined transmission line corridor in Emery, Grand, Uintah, and Washington counties, Utah. In Nevada, the species is documented in the Meadow Valley Wash, along the lower Virgin River, in the Pahranagat Valley, and in the Las Vegas Wash. It is a confirmed breeder along the Muddy River in Nevada. Critical habitat for the western yellow-billed cuckoo is proposed in Colorado, Nevada, Utah, and Wyoming.	Yes.	Floyd et al. 2007; GBBO 2010; Hughes 1999; Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Flammulated owl	*Psiloscops flammeoulus*	USFS; CO-SGCN; NV-SCP; MBTA	Range: The flammulated owl breeds from Canada, south through the western United States and Mexico. Habitat: The flammulated owl breeds and forages in montane forests, particularly ponderosa pine forests, where it feeds on moths. The species nests in cavities, especially abandoned woodpecker holes.	Regions I, II, and III: Moderate. The species occurs in Colorado, Utah, and Nevada. Suitable habitat is present in Rio Blanco County, Colorado, Sevier, and Uintah counties, Utah, and Carbon County, Wyoming. The species has been documented within 1 mile of the refined transmission line corridor.	Yes.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; Wildlife Action Plan Team 2012; WGFD 2005.
Burrowing owl	*Athene cunicularia*	BLM – WY, UT; CO-T; UT SGCN - Tier II; NV-SCP; WY SGCN - Tier I; MBTA	Range: The burrowing owl occurs from Canada, south through most of the western United States to central Mexico. Habitat: The burrowing owl breeds and forages in a wide variety of arid and semiarid environments, including grassland, desert, and shrub-steppe habitats, and agricultural areas. It nests in burrows excavated by small mammals, particularly prairie dogs and ground squirrels.	Regions I, II, III, and IV: High. The species is documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming; Moffat County, Colorado; throughout Utah; and in Clark and Lincoln counties, Nevada.	Yes.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; Wildlife Action Plan Team 2012; NDOW 2007; NatureServe 2010; Sutter et al. 2005; Bosworth 2003; WGFD 2005.
Mexican spotted owl	*Strix occidentalis lucida*	FT; BLM - UT; CO-T; UT SGCN - Tier I; MBTA	Range: The Mexican spotted owl occurs in the interior mountain ranges of western North America, including portions of Utah, Colorado, Arizona, New Mexico, Texas, and Mexico. Habitat: The Mexican spotted owl breeds and forages in mixed conifer and hardwood forests in rocky steep-walled canyons. The species utilizes a simple depression as a nest in a cave, pothole, or rock fissure in narrow, steep-wall canyons and exhibits high nest fidelity.	Regions II and III: Moderate. The species occurs in several counties in eastern Utah. Suitable habitat exists along the Utah/Colorado border in eastern Uintah County and southern Duchesne County, Utah.	Yes.	CDOW 2008; Federal Register 2004; Johnson 1997; UDWR 2008a; Sutter et al. 2005.
Great gray owl	*Strix nebulosa*	USFS MBTA	Range: The great gray owl occurs from Alaska and Canada south into the northern Rocky and Sierra mountain ranges. Habitat: The great gray owl breeds and forages in dense boreal forests interspersed with meadows.The species nests in abandoned raptor nests or on artificial nesting platforms.	Regions II and III. Low. The species is considered rare or accidental in Utah.	Yes.	Bull and Duncan 1993

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Short-eared owl	*Asio flammeus*	BLM – UT; CO - SGCN; NV - SCP; UT SGCN - Tier II; WY SGCN - Tier II; MBTA	Range: The short-eared owl occurs from Alaska and Canada, south to central California and east to Maryland. Habitat: The short-eared owl breeds and forages in broad expanses of open habitat, with dense, low vegetation including grasslands, meadows, marshes, and open sagebrush shrublands. The species is strongly associated with ungrazed and undisturbed native grasslands and wetlands that support dense small mammal populations. The short-eared owl constructs a grass nest in low vegetation.	Regions I, II, and III: High. The species is documented within the Project potential disturbance area in Millard County, Utah and Carbon and Sweetwater counties, Wyoming. It has also been documented within 5 miles of the refined transmission line corridor in Beaver, Juab, and Uintah counties, Utah.	Yes.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; Sutter et al. 2005; Bosworth 2003; WGFD 2005.
Boreal owl	*Aegolius funereus*	USFS; CO-SGCN; UT SGCN - Tier III; WY SGCN - Tier II; MBTA	Range: The boreal owl occurs from Alaska, south through the Rocky Mountains to northern New Mexico. Habitat: The boreal owl breeds and forages in mature, high elevation (above 9,000 feet amsl) conifer forests, interspersed with mature aspen stands for nesting cavities. The species requires large areas of forested habitat. It nests in large woodpecker holes or natural cavities in trees.	Regions I and II: Moderate. The species is documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming.	Yes.	Johnsgard 1988; Kingery 1998; WGFD 2005.
Black swift	*Cypseloides niger*	BLM - UT; CO - SGCN; UT SGCN - Tier II; MBTA	Range: The black swift occurs in scattered colonies throughout western North America, from southeast Alaska to central Mexico. Habitat: The black swift requires specialized nesting habitat associated with sheer cliffs, waterfalls, and dripping caves. The species forages in a variety of habitats sometimes far from nesting areas. Nests are constructed of ferns and algae.	Regions I and II: Low. The species has been documented within the Project potential disturbance area in Duchesne County, Utah. It also has been documented within 5 miles of the refined transmission line corridor in Uintah County, Utah.	Yes.	Ehrlich et al. 1988; Kingery 1998; Sutter et al. 2005; Bosworth 2003.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Lewis's woodpecker	*Melanerpes lewis*	BLM – UT, NV; CO - SGCN; NV - SCP; UT SGCN - Tier II; WY SGCN - Tier II MBTA	Range: The Lewis's woodpecker occurs from southern Canada, to south-central California and New Mexico. Habitat: The Lewis's woodpecker breeds and forages in open country with scattered trees, usually below 9,000 feet amsl. Habitat includes open ponderosa pine forests, burned-out coniferous stands, riparian and oak woodlands, and deciduous forests. The species excavates cavities for nests in trees.	Regions I, II and III: High. The species has been documented within the Project potential disturbance area in Juab, Utah, Millard, and Uintah counties, Utah.	Yes.	Floyd et al. 2007; Kingery 1998; Sutter et al. 2005; Bosworth 2003; WGFD 2005.
American three-toed woodpecker	*Picoides dorsalis*	BLM - UT; USFS; CO - SGCN; UT SGCN - Tier II; MBTA	Range: The American three-toed woodpecker occurs from Canada and Alaska, south through the Rocky Mountains to New Mexico. Habitat: The American three-toed woodpecker is a high elevation spruce-fir forest obligate. The species breeds and forages in conifer forests, particularly in burned and beetle-killed areas where it scales off bark in search of prey. The species excavates cavities for nests in trees.	Regions I and II: Moderate. The species has been documented within 5 miles of the refined transmission line corridor in Emery and Sevier counties, Utah. Suitable habitat is present within the Project potential disturbance area in Wyoming, Colorado, and Utah.	Yes.	Floyd et al. 2007; Kingery 1998; NatureServe 2010; Sutter et al. 2005; Bosworth 2003.
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE; BLM – UT, NV; CO-E; NV-E; UT SGCN - Tier I; MBTA	Range: The southwestern willow flycatcher occurs throughout the southwestern United States. Habitat: The southwestern willow flycatcher breeds and forages in dense riparian habitats with saturated soils, standing water, or nearby streams, or pools. The species constructs a grass nest in a deciduous shrub.	Regions III and IV: High. The species has been documented in Pahranagat Valley and Ash Meadows National Wildlife Refuge, Nevada, and within 5 miles of the refined transmission line corridor in Washington County, Utah. Suitable habitat occurs in Emery, Grand, Iron, and Uintah counties, Utah, and in Clark and Lincoln counties, Nevada. Designated Critical Habitat exists in Clark and Lincoln counties, Nevada and in Washington County, Utah.	Yes.	Ehrlich et al. 1988; GBBO 2010; USFWS 2003; WGFD 2009; Sutter et al. 2005; USFWS 2009; USFWS 2010b.
Loggerhead shrike	*Lanius ludovicianus*	BLM – WY, NV; CO - SGCN; NV - SCP; MBTA	Range: The loggerhead shrike occurs from south-central Canada, throughout the United States, and Mexico. Habitat: The loggerhead shrike breeds and forages in arid, open country with scattered small trees and shrubs or hedgerows. The species constructs a twig nest in a thorny tree or shrub.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming, and Lincoln County, Nevada. Suitable habitat occurs throughout the special status wildlife analysis area.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; Yosef 1996.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Sage thrasher	*Oreoscoptes montanus*	BLM – WY; NV - SCP; UT SGCN - Tier III; WY SGCN - Tier II; MBTA	Range: The sage thrasher occurs from Canada, south through the Great Basin, to Arizona and New Mexico. Habitat: The sage thrasher is a sagebrush obligate species. It breeds and forages in habitat with tall shrubs (3 to 6 feet tall) and low grass cover. The species constructs a bulky, twig nest in a sagebrush.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming, and Lincoln County, Nevada. Suitable habitat occurs in Wyoming, Colorado, Utah, and Lincoln County, Nevada.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; Wildlife Action Plan Team 2012; WGFD 2005.
Bendire's thrasher	*Toxostoma bendirei*	BLM – NV NV - SCP; UT SGCN - Tier III; MBTA	Range: The Bendire's thrasher occurs in the desert southwest. Habitat: The Bendire's thrasher breeds and forages in a variety of habitats including agricultural land, desert shrubland, grassland, pinyon-juniper woodland, and sagebrush shrubland. The species constructs a cup nest in a low tree, shrub, or cactus.	Regions III and IV: Low. Suitable habitat is present within the Project disturbance area in southwestern Utah and southern Nevada.	Yes.	England and Laudenslayer, Jr. 1993
Le Conte's thrasher	*Toxostoma lecontei*	BLM – NV; NV - SCP; MBTA	Range: The Le Conte's thrasher occurs in the desert southwest of Nevada, California, Arizona, and northwestern Mexico. Habitat: The Le Conte's thrasher breeds and forages in desert shrub, mesquite, and tall riparian shrub. The species constructs a deep, bulky nest of thorny twigs and sticks in cholla, palo verde, or creosote bush.	Regions III and IV: Low. The species occurs in Clark and Lincoln counties, Nevada.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Sheppard 1996.
Brewer's sparrow	*Spizella breweri*	BLM – WY; CO - SGCN; NV - SCP; UT SGCN - Tier III; WY SGCN - Tier II; MBTA	Range: The Brewer's sparrow occurs from southeastern Alaska south to southern California and southwestern Kansas. Habitat: The Brewer's sparrow breeds and forages in sagebrush shrublands with abundant, scattered shrubs and short grasses. The species constructs a nest of grass, forbs, and roots in a shrub or low tree.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Lincoln County, Nevada. It has been documented within 5 miles of the refined transmission line corridor in Carbon and Sweetwater counties, Wyoming. Suitable habitat occurs throughout the special status wildlife analysis area.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; NatureServe 2010; WGFD 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Sage sparrow[3]	*Amphispiza belii*	BLM – WY; CO - SGCN; NV - SCP; UT SGCN - Tier III; WY SGCN - Tier II; MBTA	Range: The sage sparrow occurs from central Washington, east to northwestern Colorado and south to Baja California and northwestern New Mexico. Habitat: The sage sparrow breeds and forages in sagebrush shrublands with tall shrubs (3 to 6 feet) and low grass cover, and requires large blocks of unfragmented habitat. The species constructs a twig nest in a sagebrush shrub.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming, Moffat County, Colorado, and Lincoln County, Nevada. It has also been documented within 5 miles of the refined transmission line corridor in Rio Blanco County, Colorado. Suitable habitat occurs throughout the special status wildlife analysis area.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; WGFD 2005.
Grasshopper sparrow	*Ammodramus savannarum*	BLM – UT; UT SGCN - Tier II; WY SGCN - Tier II; MBTA	Range: The grasshopper sparrow occurs from Canada east to southern Maine, and south to southern California and central Georgia. The main population occurs in the Great Plains. Habitat: The grasshopper sparrow breeds and forages in mid- and long-grass prairie, mixed grasslands, meadows, and open sagebrush-grasslands. The species constructs a grass nest in a depression on the ground.	Region I: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; Sutter et al. 2005; Bosworth 2003; WGFD 2005.
Baird's sparrow	*Ammodramus bairdii*	BLM – WY; MBTA	Range: The Baird's sparrow occurs from Canada south through the northern Great Plains. Habitat: The Baird's sparrow breeds and forages in shortgrass prairie. The species constructs a grass nest in a depression on the ground.	Region I: Low. This species may occur in grasslands and weedy fields in the BLM Rawlins Field Office, but suitable habitat is likely outside of the special status wildlife analysis area.	No.	NatureServe 2010; WGFD 2005.
Bobolink	*Dolichonyx oryzivorus*	BLM – UT; CO - SGCN; UT SGCN - Tier II; MBTA	Range: The bobolink occurs from Canada, south to eastern Oregon, central Colorado, central Illinois, and western North Carolina. Habitat: The bobolink breeds and forages in large expanses of grassland. The species constructs a grass nest in a depression in wet meadows, flooded pastures, and fields.	Regions I, II, and III: Moderate. The species has been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming; Uintah County, Utah; and Moffat County, Colorado. Suitable habitat occurs within the Project potential disturbance area in Wyoming, Colorado, and Utah.	Yes.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; Sutter et al. 2005; Bosworth 2003; WGFD 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
MAMMALS						
Allen's big-eared bat	*Idionycteris phyllotis*	BLM – UT, NV; UT SGCN - Tier II; NV - SCP; WY SGCN - Tier I	Range: The Allen's big-eared bat occurs in the southwestern United States and Mexico. Habitat: The Allen's big-eared bat breeds and forages in lowland riparian, desert shrub, mountain shrub, and mixed forest habitats, between 1,675 to 6,000 feet amsl. The species roosts in trees (large dead snags), mines, and caves, and forages over open water.	Regions III and IV: Moderate. The species has been documented within 5 miles of the refined transmission line corridor in Washington County, Utah, and Clark County, Nevada, primarily in the Spring Mountains. It may also occur in Lincoln County, Nevada.	Yes.	Bradley et al. 2006; Fitzgerald et al. 1994; Oliver 2000; Sutter et al. 2005.
Big free-tailed bat	*Nyctinomops macrotis*	BLM – CO, UT, NV; UT SGCN - Tier II	Range: The big free-tailed bat occurs from South America north to Mexico, Arizona, New Mexico, parts of Texas, California, Nevada, Utah, and Colorado. Habitat: The big free-tailed bat breeds and forages at lower elevations (2,700 feet to 9,200 feet amsl) in a variety of habitats, including rugged, rocky areas in arid landscapes, lowland riparian, canyons, desert scrub, floodplains, montane forest, and woodlands.The species roosts in crevices in cliff faces and occasionally in buildings and caves, and forages over open water.	Region II, III, and IV: High. The species has been documented within the Project potential disturbance area in Lincoln county, Nevada. It has been documented within 5 miles of the refined transmission line corridor in Sevier County, Utah, and Clark County, Nevada, in the Las Vegas area and the Muddy River drainage. Suitable habitat also occurs in southern Utah.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Hester and Grenier 2005; Wildlife Action Plan Team 2012; Oliver 2000; Sutter et al. 2005.
Brazilian free-tailed bat	*Tadarida braziliensis*	BLM - NV; NV - SCP	Range: The Brazilian free-tailed bat occurs from central North America, south through Mexico and Cuba, to northern South America. Habitat: The species breeds and forages in a wide variety of habitats, from desert scrub to conifer forests, between 725 to over 11,500 feet amsl. It roosts in caves, mines, trees, bridges, and buildings. Colonies often number in the thousands.	Regions II, III, and IV: High. The species has been documented within the Project potential disturbance area in Clark and Lincoln counties, Nevada. It has been recorded within 5 miles of the refined transmission line corridor in Duchesne, Juab, Sevier, Utah, and Washington counties, Utah.	Yes.	Bradley et al. 2006; Hester and Grenier 2005; Wildlife Action Plan Team 2012; Oliver 2000.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
California leaf-nosed bat	*Macrotus californicus*	NV - SCP	Range: The California leaf-nosed bat occurs from southern California and Nevada, south to Mexico. Habitat: The California leaf-nosed bat breeds and forages in low elevation (690 to 2,265 feet amsl) creosote, Mojave scrub, and riparian habitat. The species roosts in caves, mines, buildings, bridges, and rock shelters.	Regions III and IV: High. The species occurs in the extreme southern portion of Nevada. It also may forage along the Virgin River in Clark County, Nevada. Maternity roosts are believed to exist in the Muddy River drainage in Clark County, Nevada.	Yes.	AGFD 1993; Bradley et al. 2006.
California myotis	*Myotis californicus*	BLM - NV	Range: The California myotis occurs throughout much of western North America. Habitat: The California myotis breeds and forages in a variety of habitats from desert scrub to forests, including grassland and riparian areas between 690 and 8,960 feet amsl. The species roosts in a variety of structures including mines, caves, buildings, and trees, and forages over open water.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Clark and Lincoln counties, Nevada. The California myotis could occur throughout the Project potential disturbance area.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al.1994; Hester and Grenier 2005; Wildlife Action Plan Team 2012; Oliver 2000.
Cave myotis	*Myotis velifer*	BLM - NV	Range: The cave myotis occurs from Kansas, Oklahoma, and western Texas, to southern Nevada, southeastern California, south through Mexico and Honduras. Habitat: The cave myotis breeds and forages in lower elevations in desert shrub, grassland, mixed forest, cactus, and desert riparian habitats. The species roosts in caves, mines, buildings, and bridges.	Regions III and IV: Low. The species occurs in Clark County, Nevada. It has been documented in a mine in the southern portion of the Lake Mead National Recreation Area, in Nevada.	Yes.	Bradley et al. 2006
Fringed myotis	*Myotis thysanodes*	BLM – WY, CO, UT; UT SGCN - Tier II; NV - SCP; WY SGCN - Tier II	Range: The fringed myotis occurs in most of western North America, from Canada to Mexico, and east to the front range of the Rocky Mountains. Habitat: The fringed myotis breeds and forages in a wide variety of habitats, including lowland riparian, grassland, desert shrub, pinyon-juniper woodland, and meadows, between 1,380 and 7,080 feet amsl. The species roosts in mines, caves, trees, and buildings.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Clark and Lincoln counties, Nevada. It has also been recorded within 5 miles of the Project potential disturbance area in Grand County, Utah.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Wildlife Action Plan Team 2012; Oliver 2000.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Greater western mastiff bat	*Eumops perotis californicus*	BLM - NV; NV - SCP	Range: The greater western mastiff bat occurs in California, Nevada, Arizona, Texas, and Mexico. Habitat: The greater western mastiff bat breeds and forages in a variety of habitats, including desert shrub, cliff/canyon, and montane conifer forest, in a broad elevation range. The speciesroosts on large rock formations.	Region IV: Low. The species occurs in Clark County, Nevada, in the Spring Mountains, the Las Vegas Valley Wash, and along the Colorado River near Laughlin, Nevada.	Yes.	AGFD 1993; Bradley et al. 2006.
Long-eared myotis	*Myotis evotis*	BLM – WY; WY SGCN - Tier II	Range: The long-eared myotis occurs across western North America, from southwestern Canada to Baja California, and east to the Great Plains. Habitat: The long-eared myotis breeds and forages in a wide variety of habitats, including lowland riparian, sagebrush, shrubland, rock outcroppings, cliffs, and forests, between 2,265 and 10,140 feet amsl. The species roosts in hollow trees, under bark, in crevices in rock outcrops, in mines, caves, and buildings, and forages over open water.	Regions I, II, III, and IV: Moderate. The species has been documented within 5 miles of the Project potential disturbance area in Lincoln County, Nevada. Suitable habitat occurs throughout the Project potential disturbance area.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Wildlife Action Plan Team 2012; Oliver 2000.
Pallid bat	*Antrozous pallidus*	NV - SCP	Range: The pallid bat occurs from southern Canada to Mexico, and east to Texas, Oklahoma, and Kansas. Habitat: The pallid bat breeds and forages on the ground in a variety of habitats including desert scrub, grasslands, forests, cottonwood riparian areas, cliff/canyon, and urban areas, at low and middle elevations (5,900 feet amsl). The species roosts in mines, caves, hollow trees, buildings, bridges, and on rock outcrops.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Clark and Lincoln counties, Nevada. Suitable habitat occurs within the Project potential disturbance area throughout Wyoming, Utah, and Nevada. In Colorado the species occurs along the Colorado/Utah border.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Oliver 2000.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Spotted bat	*Euderma maculatum*	BLM – WY, CO, UT; USFS; UT SGCN - Tier II; NV-T; WY SGCN - Tier II	Range: The spotted bat occurs from southern Canada, through the western United States (except Washington), to Mexico. Habitat: The spotted bat breeds and forages in a variety of habitats, including lowland riparian, desert shrub, forest, grassland, and towns, from 1,770 to 6,980 feet amsl. The species is closely associated with rocky cliffs in Nevada and it roosts primarily in crevices on cliff faces.	Regions I, II, III, and IV: Moderate. The spotted bat has been documented within 5 miles of the refined transmission line corridor in Clark County, Nevada, and in Utah. It also has been documented in the Muddy River drainage and in Lincoln County, Nevada. In Colorado, it has only been reported in the extreme northwestern corner of the state, but suitable habitat occurs in western and south-central Colorado.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al.1994; Hester and Grenier 2005; Oliver 2000; Sutter et al. 2005.
Townsend's (Western) big-eared bat	*Corynorhinus townsend*	BLM – WY, CO, UT; USFS; UT SGCN - Tier II; NV - SCP	Range: The Townsend's (western) big-eared bat occurs from Canada, south across the western United States, and most of Mexico. Habitat: The Townsend's (western) big-eared bat breeds and forages in semi-desert shrublands, pinyon-juniper woodlands, cliff/canyon habitat, and open montane forests, from 690 to 11,480 feet amsl. The species is highly associated with caves and mines. It roosts in mines, caves, trees, and buildings.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Clark County, Nevada. It has been documented within 5 miles of the refined transmission line corridor in Beaver, Emery, Grand, Juab, Uintah, and Washington counties, Utah. Suitable habitat occurs throughout the Project potential disturbance area.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al.1994; Hester and Grenier 2005; NDOW 2007; Oliver 2000; Sutter et al. 2005.
Western red bat	*Lasiurus blossevillii*	BLM – UT, NV; UT SGCN - Tier II; NV - SCP	Range: The western red bat occurs from southern Canada, through the western United States and into South America. Habitat: The western red bat breeds and forages in towns and lowland riparian cottonwood/willow groves in Utah. In Nevada, the species inhabits mesquite bosque. It is distributed from 1,375 to 6,595 feet amsl and roosts in trees and leaf litter.	Regions I, II, III, and IV: Low. The species occurs in Lincoln and Clark counties, Nevada, and throughout the Project potential disturbance area in Utah.	Yes.	AGFD 1993; Bradley et al. 2006; Oliver 2000; Sutter et al. 2005.

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Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Yuma myotis	*Myotis yumanensis*	BLM – CO	Range: The Yuma myotis occurs in the western third of North America, from southwestern Canada, to Mexico. Habitat: The Yuma myotis breeds and forages in a wide variety of habitats, including sagebrush, salt desert scrub, agricultural, playa, forests, and riparian communities, between 1,475 and 7,675 feet amsl. The species roosts in buildings, trees, mines, caves, bridges, and rock crevices, and forages over open water.	Regions I, II, III, and IV: High. The species has been documented within the Project potential disturbance area in Clark County, Nevada. Suitable habitat occurs throughout the Project potential disturbance area.	Yes.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Oliver 2000.
Black-footed ferret	*Mustela nigripes*	EXP/NE; BLM - UT; CO-E; UT SGCN - Tier I	Range: The black-footed ferret formerly occurred throughout the Great Plains and Intermountain West of North America. Reintroduced populations occur in Wyoming, South Dakota, Arizona, Kansas, Montana, New Mexico, Utah, Colorado, and Mexico. Habitat: The black-footed ferret is a prairie dog-obligate. The species inhabits prairie dog colonies within grasslands and semi-desert shrublands.	Regions I and II: High. A non-essential Experimental Population Area (EXPA) is located in northwestern Colorado, southwestern Wyoming, and northeastern Utah. The EXPA is crossed by the Project potential disturbance area in Moffat and Rio Blanco counties, Colorado; and Duchesne and Uintah counties, Utah. The only non-experimental ferret populations that may occur in the Project potential disturbance area are in Grand, Emery, or Carbon counties, UT; and portions of Sweetwater and Carbon counties, Wyoming.	Yes.	50 CFR 17; BLM 2005; Clark 1989; UNHP 2009; USFWS 2008b; WYNDD 2009.
Canada lynx	*Lynx canadensis*	FT; BLM - UT; CO-E; UT SGCN - Tier I	Range: The Canada lynx occurs in Colorado, Idaho, Maine, Michigan, Minnesota, Montana, New Hampshire, New York, Oregon, Utah, Wyoming, Vermont, Washington, and Wisconsin. Habitat: The Canada lynx inhabits boreal forests. The species utilizes early succession habitats with high tree densities for foraging. It utilizes mature forests with large, woody debris for denning.	Region II: Low. Potential Canada lynx habitat in Utah is identified as peripheral, which is likely not adequate to support showshoe hare or lynx populations. Linkage habitat for dispersing lynx beyond their home ranges is present within the lynx analysis area.	Yes.	Interagency Lynx Biology Team 2013; Ruediger et al. 2000; Sutter et al. 2005; USFWS 2005; UNHP 2009.
Fisher	*Martes pennanti*	USFS	Range: The fisher occurs across much of northern North America, south along the western half of Washington, Oregon, and northern California. Its range also extends south along the Rocky Mountains into western Wyoming. Habitat: The fisher inhabits dense mixed deciduous-conifer forests.	Regions I and II: Low. The species is believed to be extirpated from Utah. Only one occurrence of the fisher has ever been reported in Utah, in 1938.	Yes.	Fitzgerald et.al. 1994; UNHP 2009.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Gray wolf	*Canis lupus*	FT-UT; CO-E; BLM - UT; UT SGCN - Tier I	Range: The gray wolf formerly occupied most of North America. Remnant populations exist in Minnesota, Wisconsin, Michigan, Idaho, Montana, Wyoming, and Washington. Habitat: The gray wolf formerly occupied a variety of habitats such as temperate forests, mountains, tundra, taiga, and grasslands, with plentiful large prey. The species requires a large (25 to 1,500 square miles) home range. Current wolf populations are typically found in remote montane forests.	Regions I and II: Low. Large tracts of suitable gray wolf habitat are not present within the gray wolf analysis area. It is possible for dispersing gray wolves to pass through the Project potential disturbance area; however, the species is considered extirpated in Utah.	Yes.	Fitzgerald et al. 1994; Sutter et al. 2005; Bosworth 2003; USFWS 2012b.
Kit fox	*Vulpes macrotis*	BLM - UT; CO-E; UT SGCN - Tier II	Range: The kit fox occurs in the southwestern United States and northern Mexico. Habitat: The kit fox inhabits desert and semi-desert shrubland and grasslands.	Regions II, III, and IV: High. The species has been documented within the Project potential disturbance area in Beaver, Emery, Grand, Millard, and Washington counties, Utah, and Clark County, Nevada. It also has been documented within 5 miles of the refined transmission line corridor in Iron, Juab, and Sevier counties, Utah.	Yes.	Fitzgerald et al. 1994; NDOW 2007.
River otter	*Lontra canadensis*	CO-T	Range: The river otter occurs throughout most of North America, north of Mexico, except in the extreme southwestern United States. It is extirpated or rare in large areas of the interior United States. Habitat: The river otter occurs in a variety of permanent riverine, aquatic, and riparian habitats, with slow-moving water, deep pools, abundant riparian vegetation, and plentiful fish. The species utilizes dens in hollow logs, beaver lodges, burrows dug by other animals, log or rock piles, or dense thickets near water.	Regions I and II: Moderate. The species has been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming; and Duchesne, Grand, and Uintah counties, Utah. In Colorado, the species has been re-introduced in several river drainages and occurs throughout the western half of the state.	Yes.	Fitzgerald et al. 2006; Sutter et al. 2005; WGFD 2005.
Swift fox	*Vulpes velox*	BLM – CO, WY; WY SGCN - Tier II	Range: The swift fox occurs over most of the Great Plains of North America, from southern Canada to northern Texas. Habitat: The swift fox inhabits short grass and mixed-grass prairies. The species is closely associated with prairie dog colonies.	Region I: Moderate. The species has been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming. Suitable habitat occurs throughout the Project potential disturbance area in Wyoming.	Yes.	Fitzgerald et al. 1994; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
North American wolverine	*Gulo gulo luscus*	Proposed Threatened, Proposed EXP/NE; USFS; CO-E	Range: The wolverine occurs in northern North America. Historically, it was present in suitable habitat at high elevations, south into the United States along the Rocky Mountains. Habitat: The species inhabits boreal forests and tundra, and utilizes riparian habitat.	Regions I and II: Low. The distribution of the North American wolverine in Colorado, Utah, and Wyoming is uncertain. A lack of records for Colorado and Utah after 1921 suggests that the wolverine was previously extirpated from the area. Wolverines are unlikely to occur in the Project potential disturbance area due to the lack of remote, high-elevation alpine habitat that would support the species.	Yes.	75 FR 78030-78061; Fitzgerald et al. 1994; Bosworth 2003; WGFD 2012.
Desert bighorn sheep	*Ovis canadensis nelsoni*	USFS	Range: The desert bighorn sheep occurs in mountain ranges throughout the southwestern United States. Habitat: The desert bighorn sheep inhabits steep desert mountains with abundant grass and low shrubs.	Regions II, III, and IV: Low. The subspecies occurs in western Colorado near the Colorado/Utah border, the extreme southwestern corner of Utah, Grand and Emery counties, Utah, and southern Nevada.	Yes.	Armstrong 2010; NDOW 2010; UDWR 2008b.
Rocky Mountain bighorn sheep	*Ovis canadensis*	USFS	Range: Bighorn sheep occur throughout the Rocky Mountains, from Canada to Mexico. Rocky Mountain bighorn sheep occur in the northern portion of this range in Wyoming, northern Utah, and western Colorado. Habitat: The species inhabits steep, high mountain terrain. Summer habitat is primarily alpine tundra. Winter habitat is lower elevation open, grass areas and slopes, with low shrubs.	Regions I, II, and III: Moderate. The species occurs in isolated areas in northwestern Colorado and northeastern and east-central Utah.	Yes.	Armstrong 2010; UDWR 2008; WGFD 2005.
Dark kangaroo mouse	*Microdipodops megacephalus*	BLM - UT; UT SGCN - Tier II	Range: The dark kangaroo mouse occurs from southeastern Oregon, through eastern California, southwestern Idaho, and west-central Utah. Habitat: The dark kangaroo mouse inhabits desert shrub and sagebrush communities with fine, gravel soils.	Regions II and III: High. The species has been documented within the Project potential disturbance area in Lincoln County, Nevada. It has been documented within 5 miles of the refined transmission line corridor in Beaver, Iron, and Millard counties, Utah. Suitable habitat occurs throughout the Project potential disturbance area.	Yes.	Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Pale kangaroo mouse	*Microdipodops pallidus*	BLM - NV; NV - SCP	Range: The pale kangaroo mouse occurs in western and west-central Nevada and in extreme eastern California. Habitat: The pale kangaroo mouse is considered to be a sand obligate and is restricted to fine, loose, sandy soils (with little or no gravel overlay) in valley bottoms dominated by saltbush and greasewood. The species also may occur near sagebrush at its higher elevation range. The elevational range for this species is from between 3,900 and 6,000 feet amsl.	None. The geographic range for this species is species is outside the Project potential disturbance area.	No.	Wildlife Action Plan Team 2012; Hafner et al. 2008; Hafner and Upham 2011.
Desert Valley kangaroo mouse	*Microdipodops megacephalus albiventer*	NV - SCP	Range: The Desert Valley kangaroo mouse occurs in the Desert Valley in central Lincoln County, Nevada. Habitat: The Desert Valley kangaroo mouse inhabits loose sands and gravel. The species inhabits shadscale scrub, sagebrush scrub, and alkali sink plant communities. It may also occur in sand dunes near the margins its range.	Region III: High. The subspecies has been documented within the Project potential disturbance area in Lincoln County, Nevada.	Yes.	Wildlife Action Plan Team 2012.
Preble's meadow jumping mouse	*Zapus hudsonius preblei*	FT; BLM – WY; WY SGCN - Tier II	Range: The Preble's meadow jumping mouse occurs in the foothills of southeastern Wyoming south to Colorado Springs along the eastern edge of the Colorado Front Range. Habitat: The Preble's meadow jumping mouse inhabits marshy areas and moist meadows near streams in grasslands, coniferous and deciduous forests, mixed shrublands, and riparian shrub, above 8,000 feet.	None. The subspecies occurs within the BLM Rawlins Field Office boundaries in Wyoming, outside of the Project potential disturbance area.	No.	NatureServe 2010; USFWS 2010b; WGFD 2009.
Preble's shrew	*Sorex preblei*	UT SGCN - Tier II	Range: The Preble's shrew occurs over much of western North America. Habitat: The Preble's shrew inhabits wetland areas.	None. The species is only known to occur from two localities in Tooele County, Utah at the southern shore of the Great Salt Lake.	No.	UDWR 2010b; Sutter et al. 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
Silky pocket mouse	*Perognathus flavus*	UT SGCN - Tier II	Range: The silky pocket mouse occurs in the Southwestern and west-central Great Plains and intermountain plateaus from South Dakota to central Mexico. Habitat: The silky pocket mouse inhabits sandy, sometimes rocky, soils in arid grasslands, shrublands, and pinyon-juniper woodland, in valley bottoms, hillsides, and mesas.	None. The species occurs in San Juan County, Utah, outside the Project potential disturbance area.	No.	NatureServe 2010; Sutter et al. 2005.
Mexican vole	*Microtus mexicanus*	UT SGCN - Tier II	Range: The race of Mexican vole that occurs in Utah is nearly endemic to the state. Habitat: The Mexican vole inhabits mixed aspen/ponderosa pine forests.	None. The species occurs only on one mountain in extreme southwestern San Juan county, outside of the Project potential disturbance area.	No.	Sutter et al. 2005.
Idaho pocket gopher	*Thomomys idahoensis*	BLM – WY; WY SGCN - Tier II	Range: The Idaho pocket gopher occurs in eastern Idaho, southwestern Montana, western Wyoming, and northeastern Utah. Habitat: The Idaho pocket gopher inhabits areas of shallow rocky soils at medium to high elevations in open sagebrush, grassland plains, and subalpine mountain meadows.	Region II: Low. The species is very rare and could occur in Uintah County, Utah.	Yes.	NatureServe 2010; Sutter et al. 2005.
Gunnison's prairie dog	*Cynomys gunnisoni*	BLM - UT; UT SGCN - Tier II	Range: The Gunnison's prairie dog occurs in the southwestern quarter of Colorado, the southeastern corner of Utah, the northeastern quarter of Arizona and the northwestern quarter of New Mexico. Habitat: The Gunnison's prairie dog inhabits grasslands, semi-desert, and montane shrublands.	None. The geographic range for this species is outside the Project disturbance areas.	No.	Fitzgerald et al. 1994; Sutter et al. 2005; Bosworth 2003.
Utah prairie dog	*Cynomys parvidens*	FT; BLM - UT; UT SGCN - Tier I	Range: The Utah prairie dog occurs in the southwestern quarter of Utah. Habitat: The Utah prairie dog inhabits prairies, including swale formations with moist vegetation even in drought, and well-drained soils that allow deep (3 feet) burrows. Vegetation must be low enough to permit a standing Utah prairie dog to scan their environment for predators.	Regions II and III: High. The species has been documented within the Project potential disturbance area in Iron, Millard, and Sevier counties, Utah. The greatest concentrations of the species occur in eastern Iron and southern Sevier counties.	Yes.	Hoogland et al. 2006; Sutter et al. 2005; Bosworth 2003; USFWS 1991.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References
White-tailed prairie dog	*Cynomys leucurus*	BLM – WY, UT; UT SGCN - Tier II	Range: The white-tailed prairie dog occurs in western and southern Wyoming, northwestern Colorado, and east-central Utah. Habitat: The white-tailed prairie dog inhabits open shrublands, semi-desert grasslands, and mountain valleys.	Regions I and II: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming; and Duchesne, Emery, Grand, and Uintah counties, Utah. It also occurs in northwestern Colorado.	Yes.	Fitzgerald et al. 1994; Sutter et al. 2005; Bosworth 2003; WGFD 2009.
Black-tailed prairie dog	*Cynomys ludovicianus*	BLM - WY	Range: The black-tailed prairie dog occurs throughout the Great Plains of North America, from Canada to Mexico. Habitat: The black-tailed prairie dog inhabits grasslands.	None. The species occurs in eastern Colorado and eastern Wyoming, outside of the Project potential disturbance area.	No.	CPW 2010a; NatureServe 2010.
Wyoming pocket gopher	*Thomomys clusius*	BLM – WY, WY SGCN - Tier I	Range: The Wyoming pocket gopher occurs in southeastern Sweetwater County and southwestern Carbon County, Wyoming. Habitat: The Wyoming pocket gopher inhabits greasewood flat communities on dry, gravelly, shallow-soil ridge tops, on the edges of eroding washes.	Region I: High. The species has been documented within the Project potential disturbance area in Sweetwater County, Wyoming. It has also been documented within 5 miles of the refined transmission line corridor in Carbon County, Wyoming.	Yes.	Keinath and Beauvais 2006; WGFD 2005.
Pygmy rabbit	*Brachylagus idahoensis*	BLM – WY, UT; USFS; UT SGCN - Tier II; WY SGCN - Tier II	Range: The pygmy rabbit occurs throughout the Great Basin, from Washington, south to east-central California and east to Utah and Wyoming. Habitat: The pygmy rabbit is a sagebrush obligate and inhabits dense, tall stands of big sagebrush, usually along intermittent streams or riparian areas in sagebrush-grasslands. The species excavates its own burrows in soft, deep soil.	Regions I, II, and III: High. The species has been documented within the Project potential disturbance area in Carbon and Sweetwater counties, Wyoming. It has also been documented within 5 miles of the refined transmission corridor in Iron, Millard, and Washington counties, Utah; and Lincoln County, Nevada. In Utah, the species occurs primarily in the Bonneville Basin. It also has been documented in the Vermillion Cliffs area of northwestern Colorado. Suitable habitat occurs in Lincoln and northeastern Clark counties, Nevada.	Yes.	Estes-Zumpf et al. 2014; Fitzgerald et al. 1994; Wildlife Action Plan Team 2012; Sutter et al. 2005; Bosworth 2003; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence[2]	Carried Forward in Detailed Analysis	References

[1] Status:

FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate; EXP/NE = Experimental Non-essential population; BLM = BLM Sensitive (by state: BLM – WY, CO, UT, NV [Las Vegas Field Office only]); USFS = USFS Sensitive; CO-E = Colorado State Endangered; CO-T = Colorado State Threatened; CO SGCN = Colorado Species of Greatest Conservation Need; NV-E = Nevada State Endangered; NV-T = Nevada State Threatened; NV-SCP = Nevada Species of Conservation Priority; NV-S1, NV-S2 = Nevada State Status; UT-SGCN = Utah Species of Greatest Conservation Need (Tier I, Tier II, and Tier III species are defined in Utah's Comprehensive Wildlife Strategy); WY-SGCN = Wyoming Species of Greatest Conservation Need (Tier I, II, and III are defined in the WFGD State Wildlife Action Plan); BGEPA = Bald and Golden Eagle Protection Act; MBTA = Migratory Bird Treaty Agreement.

[2] Potential for Occurrence

High = The species occurs within suitable habitat that may be disturbed by the Project (determined from Natural Heritage data).

Moderate = The species occurs within 5 miles of the refined transmission corridor (determined from Natural Heritage data) and/or suitable habitat for the species that may be disturbed by the Project.

Low = The refined transmission corridor is within the known geographic range of the species.

None = The refined transmission corridor is outside the geographic range of the species.

[3] The sage sparrow species (Amphispiza belli) has recently been has been split into Sagebrush Sparrow (Artemisiospiza nevadensis) and Bell's Sparrow (Artemisiospiza belli). The sagebrush sparrow is the species that could occur along the Project in all four regions.

Notes:

- All avian species in Table G-2 (except grouse species) are protected by the Migratory Bird Treaty Act, as amended.
- The bald eagle and golden eagle are further protected under the Bald and Golden Eagle Protection Act.
- Nevada protected avian species are all species of wild birds protected by the Migratory Bird Treaty Act, as amended and are listed in 50 C.F.R., Unless such wild birds are migratory game birds as described in subsection 2 of NAC 503.045.
- By definition, all birds in Table G-2 except the Columbian sharp-tailed grouse, Gunnison sage-grouse, and greater sage-grouse are considered Nevada protected species.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
AMPHIBIANS						
Arizona toad	*Bufo microscaphus*	BLM; UTSC	Range: Historically, this species was widespread in Las Vegas Valley, but it is no longer present. Habitat: Species uses spring, washes, and ephemeral waterbodies.	Low. Historic records exist in Duck, Stevens Springs, Vegas Wash, Flamingo Wash, and Tropicana Wash, with the closest location being 270 feet to the west of a project refined transmission corridor. Records also exist near corridor in Clover Creek and Meadow Valley Wash in Nevada.	Yes.	Bradford 2002.
Boreal toad	*Bufo boreas boreas*	CO-E; USFS; UT-CAS; WY-SGCN Tier I	Range: Present distribution includes southeastern Alaska south to northern California, and east to Montana, Wyoming, and Colorado. Habitat: Species non-breeding habitat consists of forested areas and upland vegetation. Breeding habitat includes low-gradient streams, marshes, beaver ponds, small lakes and reservoirs, stock ponds, wet meadows, and seeps.	High. Project refined transmission corridor cross habitat near Birch Creek in Juab County, Utah.	Yes.	Hogrete et al. 2005; Orabona et al. 2009; UDWR 2010c.
Columbia spotted frog	*Rana luteiventris*	FC; USFS; NV-P; UTSC; UT-CAS	Range: Distribution includes Alaska, British Columbia, south through Washington and Oregon to Nevada and north to Montana, Wyoming, and Utah. Habitat: Species occurs in streams, wet meadows, springs and springbrooks, marshes, lakes, and reservoirs. It is highly aquatic, since it is rarely found far from permanent waterbodies. It may traverse upland areas during wet periods or to reach wintering sites.	High. Project refined transmission corridor cross the following waterbodies inhabited by this species: San Pitch River, Orson's Pond, Mt. Pleasant Canal, and Currant Creek and wetland complex in Utah.	Yes.	Orabona et al. 2009; eNature 2010.
Great Basin spadefoot toad	*Spea intermontana*	WY-N; WY-SGCN Tier I	Range: This species distribution extends throughout all of Nevada and into most of Utah; they are also present in small areas in California, Arizona, Colorado, and Wyoming. Habitat: Species occurs in sagebrush habitats below 6,000 feet amsl, west of the Continental Divide.	Moderate. Potential habitat exists in Region I analysis area, although there are no occurrences within the refined transmission corridor.	Yes.	Orabona et al. 2009.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Northern leopard frog	*Rana pipiens*	USFS; BLM; NV-P; WY-SGCN Tier III	Range: Distribution of species includes portions of Nevada, Utah, Colorado, and Wyoming. Habitat: Species occurs in marshes, beaver ponds, streams, rivers, and lakes up to an elevation of 9,000 feet amsl.	High. Project refined transmission corridors cross the following waterbodies inhabited by this species: Muddy and Antelope creeks, and possibly Soap Wash in Wyoming; the White and Yampa rivers in Colorado; and Soldier Creek in Utah County, Utah.	Yes.	Orabona et al. 2009.
Relict leopard frog	*Rana onca*	NV-SP; FC	Range: A 2.3-mile linear stretch of the Overton Arm of Lake Mead and a 3.2 mile stretch of Black Canyon below Lake Mead. Species has been reintroduced in Red Spring, Quail Spring, and Perkins Pond in Clark County, Nevada. Habitat: Spring systems with largely unadulterated hydrology, devoid of introduced bullfrogs (*R. catesbiana*) or game fishes.	Moderate. Habitat exists near the one of the alternatives in Region IV.	Yes.	Bradford et al. 2004.
FISH						
Big Spring spinedace	*Lepidomeda mollispinis pratensis*	FT; NV-P	Range: Species is restricted to a 4-mile section of Upper Meadow Valley Wash (Condor Canyon) in Panaca and Dry valleys, Nevada. Habitat: Characteristics of stream habitat includes depths of 1 to 3 feet with moderate flow and silt, sand or gravel substrates.	None.	No. Condor Canyon section is located 10 miles north of the closest project corridor.	USFWS 1985c.
Bluehead sucker	*Catostomus discobolus*	BLM; UT-CAS; WY-SGCN Tier I	Range: This species is found in the rivers and tributary streams within the Colorado River Basin. Current distribution includes the Colorado, Dolores, Duchesne, Escalente, Fremont, Green, Gunnison, Price, San Juan, San Rafael, White, and Yampa rivers and numerous smaller tributaries. It also occurs in the Lower Colorado River Basin. Habitat: The species inhabits various stream habitats ranging from small tributaries to large mainstem rivers. Habitat typically consists of runs or riffles with rock or gravel substrates. Juveniles also utilize riffles, eddies, and backwaters.	High. Project refined transmission corridors cross the following streams inhabited by this species in Utah: Duchesne County (Cottonwood, Currant, Dry Gulch, and Lake Fork creeks); Uintah County (Dry Gulch and Montes creeks and the Uinta River); Wasatch County (Currant Creek and Strawberry River).	Yes.	Ptacek et al. 2005.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Bonneville cutthroat trout	*Oncorhynchus clarki utah*	BLM; FS; UT-SC; UT-CAS	Range: This species occurs in a variety of habitats within the Bonneville Basin. Habitat: Species prefers small headwater streams with pool and riffle habitat and slow, deep water with vegetated streambanks.	High. Project refined transmission corridors cross streams inhabited by this species In the following Utah counties: Carbon, Duchesne, Sanpete, Utah, and Wasatch.	Yes.	Lentsch et al. 2000; Sigler and Sigler 1996
Bonytail	*Gila elegans*	FE; BLM	Range: Captures of wild adult bonytail have occurred in Lakes Powell, Mohave, and Havusu, and rivers (Colorado, Green, and Yampa) in the Upper Colorado River Basin. Habitat: This species is considered to be adapted to mainstem rivers in pools and eddies and reservoirs. Bonytail probably spawn in the spring over rocky substrates.	Low to moderate. Species occurs in areas located downstream of stream crossings in Colorado and Utah.	Yes.	USFWS 2002a.
Colorado pikeminnow	*Ptychocheilus lucius*	FE; BLM	Range: Species occurs within three subbasins and includes the following rivers: Green River Subbasin (Green, Yampa, Little Snake, White, Price, and Duchesne), Upper Colorado Subbasin (Upper Colorado, Gunnison, and Dolores), and San Juan (San Juan). Habitat: Adults require pools, deep runs, and eddy habitats maintained by high spring flows. Side-channels are considered to be spawning sites in the spring. Young fish use backwater areas for development.	High. Project refined transmission corridors cross the following streams inhabited by this species: White and Yampa rivers in Colorado; Little Snake River in Wyoming; and Green River in Utah.	Yes.	USFWS 2002b.
Colorado River cutthroat trout	*Oncorhynchus clarki pleuriticus*	BLM; FS; UT-CAS; WY-SGCN Tier I	Range: The species is native to the upper Colorado Basin in parts of Wyoming, Colorado, and Utah. Habitat: This species is typically associated with isolated headwater streams with cool temperatures and clear conditions.	High. Project refined transmission corridors cross streams inhabited by this species in the following counties: Wyoming (Carbon and Sweetwater); Colorado (Moffatt, Rio Blanco, and Routt); and Utah (Emery, Grand, Uintah, Utah, and Wasatch).	Yes.	Behnke 1981.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Devil's Hole pupfish	*Cyprinodon diabolis*	NV-P	Range: Species occurs in Devil's Hole located in Ash Meadows National Wildlife Refuge in Nevada. Habitat: A deep cavern in Devil's Hole.	None.	No. This species occurs at the Hoover Dam refugium located below Hoover Dam. This site is located approximately 2.3 miles to the east of the closest project refined transmission corridor.	USFWS 2010c.
Flannelmouth sucker	*Catostomus latipinnis*	BLM; UT-CAS; WY-SGCN Tier I	Range: This species is widely distributed in medium and large–sized streams in the Upper Colorado Basin including Colorado and Wyoming. It is less abundant or absent from its historical range in Nevada, Utah, Arizona, and California. Habitat: Species is typically found in slower, warmer rivers in plateau regions. They prefer pools and deep runs but also occur in the mouths of tributaries, riffles, and backwaters. Juveniles utilize backwaters and shoreline areas.	High. Project corridors cross the following streams inhabited by this species: Muddy Creek and Little Snake River in Wyoming and Cottonwood, Currant, Dry Gulch, Montes, and Strawberry creeks and Lake Fork and Strawberry rivers in Utah.	Yes.	Rees et al. 2005a.
Greenback cutthroat trout	*Oncorhynchus clarki stomias*	FT	Range: This species currently occurs in upper tributaries of the South Platte and Arkansas river drainages in eastern Colorado and portions of the Colorado River tributaries in western Colorado. Habitat: Species occurs in single stream segments or small lake habitats.	None.	No. Lakes and streams inhabited by this species are not crossed by project refined transmission corridors.	USFWS 1998a; Williams 2006.
Hiko White River springfish	*Crenichthys baileyi grandis*	FE; NV-P	Range: This species occupies Hiko and Crystal springs in Paharanagat Valley, Nevada. Habitat: Species occurs in pool areas of two springs.	None.	No. Hiko and Crystal springs are located 20 to 21 miles west of the closest project refined transmission corridor.	USFWS 1998b.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Humpback chub	*Gila cypha*	FE; BLM	Range: Species occurs in deep canyon portions of the Colorado River system such as Desolution-Gray, Black Rocks and Westwater canyons and Yampa Canyon inside Dinosaur National Monument in the Upper Colorado Basin. Populations also exist in the Lower Colorado Basin in the Grand Canyon and Little Colorado River. Habitat: Species prefers deep, fast-moving, turbid waters with large boulder substrates and steep cliffs.	Low to moderate. Species occurs in areas located downstream of stream crossings in Wyoming, Colorado, and Utah.	Yes.	CPW 2010b; UDWR 2010d.
June sucker	*Chasmistes liorus*	FE; BLM; UTSC	Range: Distribution is limited to Utah Lake and the Provo River in Utah. Habitat: Adults and juveniles occur in lake habitat. Adults use the Provo River for spawning and early development of young June sucker.	None.	Yes. This species is not known to occur in streams crossed by project refined transmission corridors. However, it was included in the analysis to evaluate potential effects of water use.	USFWS 1999.
Lahontan cutthroat trout	*Oncorhynchus clarki henshawi*	FT	Range: Distribution of this species includes isolated drainages of the Lahontan Basin in Nevada. Habitat: Species occurs in terminal lakes and isolated headwater streams in the Lahontan basin.	None.	No. Lakes and streams inhabited by this species are not crossed by project refined transmission corridors.	Neville 2010.
Least chub	*Iotichthys phlegethontis*	C; BLM; UT-SC; UT-CAS	Range: This species is native to the Bonneville Basin in Utah. Habitat: Species occurs in slow-moving rivers, creeks, ponds, and marshes. Typically this species is assocated with moderate to dense vegetation.	Low to moderate. Species occurs in areas located downstream of stream and wetland areas in Utah. The closest location to a refined transmission corridor is 1.5 miles.	Yes.	USFWS 2012c.
Meadow Valley Wash desert sucker	*Catostomus clarkii spp.*	BLM; NV-P	Range: Species inhabits the Meadow Valley Wash drainage in Nevada. Habitat: Typically they occur in small to moderately large streams with pools and riffles with gravel, rubble, and sandy substrates.	High. Species known to occur in Meadow Valley Wash and the Muddy River in Nevada.	Yes.	NDOW 2009.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Meadow Valley Wash speckled dace	*Rhinicthys osculus subspecies*	BLM	Range: Species inhabits the Meadow Valley Wash drainage in Nevada. Habitat: Species occurs in a variety of habitats including riffles, runs, and pools in streams and rivers; ponds and lakes; and spring outflows.	High. Species occurs in Meadow Valley Wash and the Muddy River in Nevada.	Yes.	NDOW 2009.
Moapa dace	*Moapa coriacea*	FE	Range: Species is endemic to the Upper Muddy River and tributary thermal spring systems within the Warm Springs area in Nevada. Habitat: Species utilizes spring pools, spring outflows, and the mainstem portion of the Muddy River.	None	No. This species occurs in a section of the Muddy River, which is located approximately 0.5 iles upstream of the closest project refined transmission corridor.	USFWS 1996.
Moapa speckled dace	*Rhinichthys osculus moapae*	NV-P	Range: This subspecies is endemic to the Muddy River Basin in Nevada. Habitat: Species utilizes a variety of habitats in streams and spring sources.	High. Species known to occur in the Muddy River, Nevada just north of a project corridor. Species likely occurs in portion of river crossed by an refined transmission corridor.	Yes.	Wildlife Action Plan Team 2006; USFWS 1996.
Moapa White River springfish	*Crenichthys baileyi moapae*	NV-P	Range: Species occurs in the Muddy River Basin in Nevada. Habitat: Species occurs in vegetated warm springs and their outflows.	High. Species known to occur in the Muddy River, Nevada just north of a project corridor. Species likely occurs in portion of river crossed by an refined transmission corridor.	Yes.	Wildlife Action Plan Team 2006; USFWS 1996.
Mountain sucker	*Catostomus platyrhynchus*	BLM	Range: Species is widely distributed in the western U.S. including Wyoming and Colorado streams. Habitat: Species occurs in smaller streams and rivers in areas with eddies, small pools, and undercut banks and moderate current.	High. Species has been collected in Colorado River tributaries crossed by project refined transmission corridors, including Utah streams such as Currant Creek, San Pitch River, and Thistle Creek.	Yes.	Woodling 1985.
Northern leatherside chub	*Lepidomeda copei*	FS; UT-CAS	Range: Species is native to the southeastern portion of the Bonneville Basin in Utah. Habitat: Species occurs in streams and rivers with relatively low water velocity, intermediate depths (9 to 26 inches), fine substrates.	None.	No. This species is not known to occur in streams crossed by project refined transmission corridors.	Idaho Fish and Game 2005.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Pahrump poolfish	*Empetrichthys latos*	FE; NV-P	Range: This species occurs in Shoshone Ponds in White Pine County and Corn Creek in Clark County, Nevada. Habitat: Species occurs in shallow springs and their outflow areas.	None.	No. Distances of occupied habitat from the closest project refined transmission corridor include 17 miles for Shoshone Ponds and 6 miles for Corn Creek Refugium.	USFWS 1980.
Pahranagat roundtail chub	*Gila robusta jordani*	FE; NV-P	Range: This species presently occurs in a small section of Pahranagat Creek in Paharanagat Valley, Nevada. Habitat: Adults and juveniles typically inhabit pools below riffle areas.	None.	No. The closest occupied habitat is located approximately 5 miles west of the closest project analysiscorridor.	USFWS 1998b.
Pallid sturgeon	*Scaphirhynchus antillarum*	FE	Range: Species occurs in the Lower Platte River (downstream of Elk River confluence) in Nebraska. Habitat: Species in areas with strong current and firm sandy bottoms in the main channel of large turbid rivers.	None. However, the potential use of water for dust control in the North Platte subbasin would require impact analysis for this species.	Yes.	National Research Council 2004.
Plains topminnow	*Fundulus sciadicus*	BLM	Range: This species has a disjunct distribution in several plains states including Colorado. Habitat: Colorado populations are typically associated with quiet portions of streams with abundant filamentous algae.	None.	No.	Woodling 1985.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Razorback sucker	*Xyrauchen texanus*	FE; BLM	Range: Species occurs within five subbasins and includes the following rivers or lakes: Green River Subbasin (Green, Yampa, White, and Duchesne); Upper Colorado Subbasin (Upper Colorado and Gunnison); San Juan (San Juan); Lower Colorado River Subbasin (Lake Mohave, Lake Mead, and Lower Colorado River); and Gila River Subbasin (Verde and Salt). Habitat: Adults prefer deep runs, eddies, backwaters, and flooded off-channel habitats in the spring, runs and pools in the summer, low-velocity runs, pools, and eddies in the winter. Spawning occurs in the spring over cobble, gravel. And sand substrates. Young develop in backwaters, tributary mouths, and floodplain areas.	High. Project refined transmission corridors cross the following streams inhabited by this species: Plateau Creek, Colorado River, and White River in Colorado; Green River in Utah; and Las Vegas Wash near Lake Mead in Nevada.	Yes.	USFWS 2002c.
Relict dace	*Relictus solitarius*	BLM; NV-P	Range: Species is endemic to eastern Nevada. Refugia and introduced populations occur in Spring Valley. Habitat: Species occurs spring, spring-fed streams, ponds, intermittent lakes and marshes with mud or gravel substrates. Preferred habitat is well-vegetated pools.	None.	No. This species is not known to occur in streams crossed by project corridors in Nevada where this species is protected.	NDOW 2009.
Roundtail chub	*Gila robusta robusta*	BLM; UT-CAS; WY-SGCN Tier I	Range: This chub is an endemic species to the Colorado River Basin in Colorado and Wyoming. Habitat: This species usually is found in stream reaches with a mixture of pool and riffle habitats. Adults and juveniles are typically found in relatively deep, low-velocity habitats that contain woody debris or other types of cover.	High. Project refined transmission corridors cross the following streams inhabited by this species: Colorado, White, and Yampa rivers in Colorado; Little Snake River and Muddy Creek in Wyoming; and San Rafael River in Utah.	Yes.	Rees et al. 2005b.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Southern leatherside chub	*Lepidomeda aliciae*	BLM; FS; UT-CAS	Range: Species is present in the Utah Lake and Sevier River drainages. Habitat: Species is associated with a variety of habitat conditions involving stream flow, gradient, elevation, and pH, bit is usually found near coarse substrates.	High. Project refined transmission corridors cross the following streams inhabited by this species: Lost Creek, Sevier River, San Pitch River, Thistle Creek, Soldier Creek, and Seely Pond in Utah.	Yes.	UDWR 2010b.
Virgin River chub	*Gila robusta seminuda*	FE; BLM	Range: This species occurs within the Muddy River in Nevada and the mainstem portion of the Virgin River from La Verkin Springs, Utah downstream to the confluence with Lake Mead. Habitat: Species uses spring pools, spring outflows, and the mainstem portion of the Muddy River.	Moderate. This species occurs in the Muddy River, with the closest known downstream location to an refined transmission corridor being 2 miles. The species likely occurs in the corridor based on general distribution information.	Yes.	USFWS 1996.
Virgin River spinedace	*Lepidomeda mollispinis mollispinis*	BLM, NV-P	Range: This species currently exists in the mainstem Virgin River and 11 tributaries in Utah, Arizona, and Nevada. Habitat: Species prefers clear, slow-moving small streams with abundant cover.	High. Project refined transmission corridors cross the following streams inhabited by this species: Moody Wash in Utah.	Yes.	Lentsch et al. 1995; Sigler and Sigler 1996; UDWR 2010e.
White River desert sucker	*Catostomus clarkii intermedius*	NV-P	Range: Species occurs in White River Valley in Nevada. Habitat: Species occupies isolated stream, spring, and spring outflow systems.	None.	No. This species is not known to occur in streams crossed by project refined transmission corridors.	NDOW 2009.
White River speckled dace	*Rhinicthys osculus subspecies*	BLM	Range: Species occurs in White River Valley in Nevada. Habitat: The types of habitats are expected to be similar to Meadow Valley Wash speckled dace.	None.	No. This species is not known to occur in streams crossed by project refined transmission corridors.	NDOW 2009.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
White River spinedace	*Lepidomeda albivallis*	FE	Range: The present distribution is limited to Flag Springs and the upper portion of Sunnyside Creek in White River Valley, Nevada. The species also has been introduced into Indian Spring. Habitat: Characteristics of springs inhabited by this species clear, cool temperatures, and open pools with aquatic vegetation.	None.	No. This species is not known to occur in waterbodies crossed by project refined transmission corridors.	USFWS 1994b.
White River springfish	*Crenichthys baileyi baileyi*	FE	Range: The present distribution of this species is Ash Springs in Pahranagat Valley, Nevada. Habitat: This species utilizes pool and spring outflow habitats.	None.	No. This species is not known to occur in waterbodies crossed by project refined transmission corridors.	Tuttle et al. 1990.
Woundfin	*Plagopterus argentissimus*	FE; BLM	Range: Species is currently found in the Virgin River system in Utah. Habitat: Species prefers swift flows and sandy substrates in the Virgin River.	None.	No. This species occurs in the Virgin River, which is not crossed by project corridors.	UDWR 2010f.
INVERTEBRATES						
Bifid duct pyrg	*Pyrgulopsis peculiaris*	FP; BLM; UT-SC	Range: This species occurs in a spring near Big Springs in Snake Valley and Rock, Turnley, and Woodsman springs in Spring Valley, Nevada. Habitat: Occupied waterbodies are springbrooks at elevations from 6,000 to 7,400 feet with moderate to high conductivity and aquatic vegetation.	None.	No. This species occurs in a spring near Big Springs, which is located approximately 1.8 miles north of the closest project refined transmission corridor.	Center for Biological Diversity 2009; Hershler 1998.
California floater	*Anodonta californiensis*	BLM	Range: Historic records exist for Utah County. Current populations exist in Juab County, Utah. Habitat: Species has been collected in pond and stream habitats in Utah.	Currant Creek and Mona Springs in Juab County, Utah.	Yes.	Oliver and Bosworth 1999.
Devil's Hole Warm Spring riffle beetle	*Stenelmis calida calida*	BLM	Range: Species occurs in Devil's Hole located in Ash Meadows National Wildlife Refuge in Nevada. Habitat: A deep cavern in Devil's Hole.	None.	No. Devil's Hole is located greater than 5 miles from a project refined transmission corridor.	USFWS 2012d.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Grated tryonia	*Tryonia clathrata*	FP; BLM; NV-P	Range: Species occurs in the Muddy River system in Nevada. Habitat: Species occurs in springs.	None.	No. Species occurs in Cardy Lamb and Oasis springs and the Moapa NWR, which are located at least 1 mile from a project refined transmission corridor.	USFWS 1996.
Lake Valley pyrg	*Pyrgulopsis sublata*	FP	Range: This species is endemic to Wambolt Spring in Lake Valley. Habitat: This species occurs in a shallow spring with vegetation.	None.	No. This species occurs in Wambolt Spring, which is located approximately 2.1 miles northwest of the closest project refined transmission corridor.	Center for Biological Diversity 2009; Hershler 1998.
Longitudinal gland pyrg	*Pyrgulopsis anguina*	FP	Range: Species is known from Big Springs and an unnamed spring near Big Springs in Snake Valley, Nevada and from Clay Spring in Snake Valley, Utah. Habitat: Occupied waterbodies include warm, flowing springs with aquatic vegetation.	None.	No. This species occurs in Big Springs, which is located approximately 0.4 mile north of the closest project refined transmission corridor.	Center for Biological Diversity 2009; Hershler 1998.
Moapa pebblesnail	*Pyrgulopsis avernalis*	FP	Range: Species occurs in the Muddy River system in Nevada. Habitat: Species occurs in springs.	None.	No. Species occurs in Cardy Lamb Spring and the Moapa NWR, which are located at least 1 mile from a project refined transmission corridor.	USFWS 1996.
Moapa Warm Spring riffle beetle	*Stenelmis moapa*	BLM	Range: Species occurs in the Muddy River system in Nevada. Habitat: Species typically is found in outflow streams immediately downstream of spring sources in swift, shallow water.	High. Species known to occur in the Muddy River, Nevada just north of aproject refined transmission corridor. Species likely occurs in portion of river crossed by an refined transmission corridor.	Yes.	USFWS 1996.
Nearctic riffle beetle	*Stenelmis occidentalis*	BLM	Range: This beetle occurs in the Muddy River corridor, Moapa NWR/Warm Springs, and Ash Spring, and the Pahranagat River in Nevada. Habitat: Species occurs in wetland, spring, and river habitat. In Ash Springs, riffle beetles were present only in the spring source areas and not in the outflow.	None.	No. This species occurs in the Muddy River, with the closest known collection site being 0.5 mile northeast of a project refined transmission corridor.	Nevada Natural Heritage Program Scorecard 2006; USFWS 1996.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Carried Forward in the Detailed Analysis	References
Spring Mountains pyrg	*Pyrgulopsis deaconi*	FP; BLM; NV-P	Range: This species is endemic to the drainages of Las Vegas and Pahrump valleys in Nevada. It is present in Red, Willow, and Kiup springs. Habitat: The species occurs in permanent, artesian springbrooks that have high mineral content, unpolluted, and highly oxygenated.	None.	No. This species occurs in Red Spring in the Red Rock Canyon Recreation Area, which is located approximately 1.2 miles west of the closest project refined transmission corridor.	Center for Biological Diversity 2009; Hershler 1998.
Southern Bonneville pyrg	*Pyrgulopsis transversa*	UT-SC	Range: Species historically was present in Utah Lake. Fossil records exist for Bear Lake in Utah. The species is now extirpated in Utah. Habitat: Species occurs in relatively small, mineralized springs at elevations between approximately 5,830 and 6,740 feet elevation.	High. This species occurs in Thistle Creek, which is crossed by a project refined transmission corridor.	Yes.	Oliver and Bosworth 1999.
Utah or desert valvata snail	*Valvata utahensis*	Delisted	Range: Species historically was present in Utah Lake. Fossil records exist for Bear Lake in Utah. The species is now extirpated in Utah. Habitat: Species occurred in large, shallow, slightly alkaline waters such as Utah Lake.	None.	No. This species does not occur in the Project study area.	Oliver and Bosworth 1999.

[1] Status:

FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate; FP = Federal Proposed; BLM = BLM Sensitive; FS = USFS Sensitive; MBTA = Protected under the Migratory Bird Treaty Act; BGEPA = Protected under the Bald and Golden Eagle Protection Act; CO-E = Colorado State Endangered; CO-T = Colorado State Threatened; NV-P = Nevada State Protected; NV-LD = Species is not protected but it considered unique in Nevada (category to be discussed with NDOW); WY N = Wyoming Native (category to be discussed with WGFD); UT-CAS = Utah Conservation Agreement Species; UT-SC = Utah special concern (category to be discussed with UDWR); WY-SGCN = Wyoming Fish and Game Department Species of Greatest Conservation Need (Tier I, II, and II are defined in the WFGD State Wildlife Action Plan).

[2] Potential for Occurrence Within Project Area.

High = The species is known to occur within suitable habitat within Project corridors.

Low to moderate = The species is known to occur within 2 miles of the Project corridors in a downstream direction from the boundary of a corridor.

None = Project corridors do not occur within the geographic range of the species.

Table G-4 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region I Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector
					A	B	C	D	
Perennial Streams Crossed by Refined Transmission Corridor and 250-Foot ROW									
Little Snake River	Moffat, Colorado	Bluegill, black crappie, channel catfish, northern pike, rainbow trout, smallmouth bass	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, northern leopard frog, roundtail chub	1187	1	1		1	No
Yampa River	Moffat, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	1187	1	1		1	No
Elkhead Creek	Routt, Colorado	Black crappie, bluegill, smallmouth bass	Flannelmouth sucker	1190			1		No
Fortification Creek	Moffat, Colorado	Rainbow trout	Bluehead sucker, flannelmouth sucker, mountain sucker, roundtail chub	1190			1		No
Fourmile Creek	Moffat, Colorado	Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	1190			1		No
Little Bear Creek	Moffat, Colorado	Brook trout	None	1190			1		No
Little Cottonwood Creek	Moffat, Colorado	Colorado River cutthroat trout	Colorado River cutthroat trout	1190			1		No
Little Snake River	Carbon, Wyoming	Mountain whitefish, rainbow trout	Bluehead sucker, flannelmouth sucker, razorback sucker[3] roundtail chub	1190			1		No
Muddy Creek	Carbon, Wyoming	None	Bluehead sucker, flannelmouth sucker, northern leopard frog, roundtail chub	1190			3		No
Yampa River	Moffat, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	1190			2		No
Yampa River	Routt, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	1190			1		No
Number of Unnamed Perennials[2]	N/A	None	None	N/A	7	7	5	5	No

Table G-4 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region I Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Crossings by Alternative[1]				Variation or Connector
					A	B	C	D	
Perennial Streams Within the Potential Disturbance Area Beyond the Refined Transmission Corridor									
Dry Fork Little Bear Creek	Moffat, Colorado	None	None	1190			X		No
Wild Cow Creek	Carbon, Wyoming	None	None	1190			X		No
Willow Creek	Carbon, Wyoming	Brook trout, Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	1190			X		No
Willow Creek	Moffat, Colorado	Brook trout, Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	1190			X		No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

[3] Species occurs greater than 5 miles downstream of crossing. It is included in the analysis due to potential effects of water use during construction.

Sources: CPW 2012-2011; WGFD 2011-2010

Table G-5 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region I Corridors

Waterbody Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector
					A	B	C	D	
Perennial Waterbodies Crossed by Refined Transmission Corridor and 250-Foot ROW									
Coal Bank Lake	Carbon, Wyoming	Bluegill, largemouth bass, rainbow trout	None	1120	1	1			No
Number of Unnamed Perennial Waterbodies[2]	N/A	None	None	N/A	2	2	4	1	No
Waterbody Name	**County, State**	**Game Fish**	**Special Status**	**Segment ID**	**Crossings by Alternative**				**Variation or Connector**
					A	**B**	**C**	**D**	
Perennial Waterbodies Within the Potential Disturbance Area Beyond the Refined Transmission Corridor									
Rawlins Peaking Reservoir	Carbon, Wyoming	None	None	1030	X	X	X	X	No
Coal Bank Lake	Carbon, Wyoming	None	None	1120	X	X			No
Alkali Reservoir	Sweetwater, Wyoming	None	None	1120	X	X			No
Mexican Flats Reservoir Number 1	Carbon, Wyoming	None	None	1120	X	X			No
Coal Bank Lake	Carbon, Wyoming	Bluegill, largemouth bass, rainbow trout	None	1115				X	No
Detention Dam 1592 Number 1	Carbon, Wyoming	None	None	1115				X	No
Little Robber Detention Dam	Carbon, Wyoming	None	None	1115				X	No
Duck Lake	Carbon, Wyoming	None	None	1115				X	No
Spring Draw Reservoir	Sweetwater, Wyoming	Brown trout, largemouth bass, rainbow trout	None	1120.2	X				No
Flat Draw Reservoir	Sweetwater, Wyoming	Brown trout, largemouth bass, rainbow trout	None	1120.2	X				No
Cherokee Reservoir	Sweetwater, Wyoming	Brown trout, largemouth bass, rainbow trout	None	1180	X				No
Dresher Reservoir	Moffat, Colorado	None	None	1190			X		No
Biskup Reservoir	Moffat, Colorado	None	None	1190			X		No
Baking Powder Reservoir	Moffat, Colorado	None	None	1100	X	X	X	X	No
Echo Springs	Carbon, Wyoming	None	None	1040	X	X		X	No
McPherson Springs	Sweetwater, Wyoming	None	None	1115				X	No
Spence Spring	Moffat, Colorado	None	None	1187	X	X		X	No
Coal Bank Spring	Carbon, Wyoming	None	None	1190			X		No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

Sources: CPW 2012-2011; WGFD 2011-2010

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Perennial Streams Crossed by Refined Transmission Corridor and 250-Foot ROW													
Stinking Water Creek	Moffat, Colorado	None	None	1210	1			1	1	1	1		No
Argyle Creek	Duchesne, Utah	Cutthroat trout	None	1217.01				1		1			No
Green River	Uintah, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail[3], Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub[3], roundtail chub, razorback sucker[3]	1217.01				1		1			No
White River (tributary to Green River)	Uintah, Utah	Channel catfish, rainbow trout, northern pike	Bluehead sucker, bonytail[3], Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub[3], northern leopard frog, roundtail chub, razorback sucker[3]	1217.01				1		1			No
Willow Creek	Uintah, Utah	Brook trout, Colorado River cutthroat trout (restoration area), rainbow trout	Colorado River cutthroat trout	1217.01				2		2			No
Minnie Maud Creek	Carbon, Utah	Cutthroat trout	None	1217.02				1					No
Soldier Creek	Carbon, Utah	Cutthroat trout	None	1217.02				0					No
Beaver Creek	Utah, Utah	Brown trout, cutthroat trout, rainbow trout	None	1217.051					1				No
Horse Creek	Utah, Utah	Not surveyed	Not surveyed	1217.051					1				No
Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1217.051					0				No
Price River	Utah, Utah	Brown trout, cutthroat trout, rainbow trout	Mountain sucker	1217.051					2				No
Tabbyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1217.051					0				No
White River (tributary to Price River)	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1217.051					0				No
Willow Creek	Duchesne, Utah	Brown trout	None	1217.051					1				No
Dairy Fork	Utah, Utah	None	None	1217.052					0	0			No
Indian Creek	Utah, Utah	Not surveyed	Not surveyed	1217.052					1	1			No
Sheep Creek	Utah, Utah	None	None	1217.052					1	1			No

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Soldier Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, mountain sucker, northern leopard frog, southern leatherside chub	1217.052					2	2			No
Tie Fork	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1217.052					1	1			No
North Fork Gordon Creek	Carbon, Utah	Cutthroat trout	None	1217.1				1					No
Price River	Carbon, Utah	Brown trout	Mountain sucker	1217.1				1					No
Summit Creek	Carbon, Utah	None	None	1217.1				1					No
Willow Creek	Carbon, Utah	Brown trout	None	1217.1				0					No
Cottonwood Creek	Sanpete, Utah	Bonneville cutthroat trout, rainbow trout	Bonneville cutthroat trout	1217.15				1					No
Gooseberry Creek	Sanpete, Utah	Cutthroat trout	None	1217.15				1					No
Maple Fork	Sanpete, Utah	Not surveyed	Not surveyed	1217.15				1					No
Mud Creek	Carbon, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, mountain sucker	1217.15				1					No
Oak Creek	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	1217.15				0					No
San Pitch River	Sanpete, Utah	Brown trout	Columbia spotted frog, mountain sucker, southern leatherside chub	1217.15				1					No
Upper Huntington Creek	Emery, Utah	Brown trout	None	1217.15				1					No
White Pine Fork	Sanpete, Utah	Not surveyed	Not surveyed	1217.15				1					No
Argyle Creek	Duchesne, Utah	Cutthroat trout	None	1219.2								0	Reservation Ridge Alternative Variation
Bear Creek	Utah, Utah	Not surveyed	Not surveyed	1219.2								1	Reservation Ridge Alternative Variation
Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								0	Reservation Ridge Alternative Variation
Right Fork Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								0	Reservation Ridge Alternative Variation
Right Fork White River	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								0	Reservation Ridge Alternative Variation
Tabbyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								0	Reservation Ridge Alternative Variation

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Tabbyune Creek	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								1	Reservation Ridge Alternative Variation
Tabbyune Creek	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								0	Reservation Ridge Alternative Variation
West Fork Willow Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.2								0	Reservation Ridge Alternative Variation
White River (tributary to Price River)	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.3						1			No
West Fork Willow Creek	Duchesne, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.45								0	Roan Cliffs Alternative Connector
Willow Creek	Duchesne, Utah	Brown trout	None	1219.45								1	Roan Cliffs Alternative Connector
Horse Creek	Utah, Utah	Not surveyed	Not surveyed	1219.5						1			Reservation Ridge Alternative Variation Comparison
Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.5						1			Reservation Ridge Alternative Variation Comparison
Right Fork Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.5						1			Reservation Ridge Alternative Variation Comparison
Tabbyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.5						1			Reservation Ridge Alternative Variation Comparison
West Fork Willow Creek	Duchesne, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.5						3			Reservation Ridge Alternative Variation Comparison
West Fork Willow Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.5						0			Reservation Ridge Alternative Variation Comparison
Willow Creek	Duchesne, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.6						3			Reservation Ridge Alternative Variation Comparison
Douglas Creek	Rio Blanco, Colorado	None	Northern leopard frog	1220		1	1						No

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Green River	Grand, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail[3], Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub[3], roundtail chub, razorback sucker[3]	1220		2	2						No
Thompson Wash	Grand, Utah	Not surveyed	Not surveyed	1220		1	1						No
West Salt Creek	Garfield, Colorado	None	None	1220		6	6						No
White River	Rio Blanco, Colorado	Channel catfish, rainbow trout, northern pike	Bluehead sucker, bonytail[3], Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub[3], northern leopard frog, roundtail chub, razorback sucker[3]	1220		1	1						No
Price River	Emery, Utah	Brown trout	Bluehead sucker, Colorado pikeminnow, flannelmouth sucker	1222.05		2							No
Cedar Creek	Emery, Utah	None	None	1222.3		1							No
Huntington Creek	Emery, Utah	Brown trout, Colorado River cutthroat trout (to be restocked)	Bluehead sucker, Colorado River cutthroat trout	1222.3		1							No
Miller Creek	Carbon, Utah	None	None	1223								1	Price Alternative Connector
South Fork Gordon Creek	Carbon, Utah	None	None	1223								0	Price Alternative Connector
Huntington Creek	Emery, Utah	Brown trout, Colorado River cutthroat trout (to be restocked)	Bluehead sucker, Colorado River cutthroat trout	1225.2			1						No
Coal Fork	Sanpete, Utah	None	None	1310		1							No
Deer Creek	Emery, Utah	Not surveyed	Not surveyed	1310		1							No
Hop Creek	Juab, Utah	Brown trout	Southern leatherside chub	1310		0							No
Indian Creek	Emery, Utah	Not surveyed	Not surveyed	1310		0							No
Indian Creek	Emery, Utah	Not surveyed	Not surveyed	1310		1							No
North Creek	Sanpete, Utah	None	None	1310		1							No
Pleasant Creek	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	1310		1							No
San Pitch River	Sanpete, Utah	Brown trout	Columbia spotted frog, mountain sucker, southern leatherside chub	1310		1							No
Straight Fork	Sanpete, Utah	None	None	1310		0							No

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Dry Gulch Creek	Duchesne, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	1320.05	0				0		0		No
Dry Gulch Creek	Uintah, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	1320.05	1				1		1		No
Green River	Uintah, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail[3], Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub[3], roundtail chub, razorback sucker[3]	1320.05	1				1		1		No
Montes Creek	Uintah, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	1320.05	1				1		1		No
Uinta River	Uintah, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	1320.05	1				1		1		No
Lake Fork	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	1320.15	1				1	1	1		No
Nebo Creek	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1320.15	0				0	0	0		No
Soldier Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, northern leopard frog, southern leatherside chub	1320.15	0				0	0	0		No
Thistle Creek	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout, mountain sucker, southern leatherside chub, southern Bonneville pyrg (spring)	1320.15	1				1	1	1		No
Hop Creek	Juab, Utah	Brown trout	Southern leatherside chub	1320.2	1			1	1	1	1		No
Salt Creek	Juab, Utah	Brown trout	None	1320.2	0			0	0	0	0		No
Salt Creek	Juab, Utah	Brown trout	None	1320.21	0	0		0	0	0	0		No
Duchesne River	Duchesne, Utah	Brown trout, mountain whitefish, rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	1321.01	1						1		No
Lake Fork River	Duchesne, Utah	Brook trout, brown trout, cutthroat trout, grayling, rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	1321.01	1						1		No
Currant Creek	Duchesne, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1322.23							1	1	Fruitland Mico-siting Options 2 and 3
Currant Creek	Duchesne, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1323.01	1							1	Fruitland Mico-siting Option 1
Currant Creek	Wasatch, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1323.01	1							1	Fruitland Mico-siting Option 1

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Currant Creek	Duchesne, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1322.71								0	Fruitland Mico-siting Option 3
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.02	0								
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.12								1	Fruitland Mico-siting Option 2
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.21							1		
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.52								0	Fruitland Mico-siting Option 1
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.53								0	Fruitland Mico-siting Option 1
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.71								1	Fruitland Mico-siting Option 3
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1323.01	1							1	Fruitland Mico-siting Option 1
Strawberry River	Wasatch, Utah	Brook trout, brown trout, Colorado River cutthroat trout	Bluehead sucker, Colorado River cutthroat trout	1323.02	1						1		
Sheep Creek	Utah, Utah	None	None	1325	1						1		No
Soldier Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, mountain sucker, Columbia spotted frog, northern leopard frog, southern leatherside chub	1325	1						1		No
Tie Fork	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1325	1						1		No
Argyle Creek	Duchesne, Utah	Cutthroat trout	None	1325.1					2				No
Duchesne River	Duchesne, Utah	Brown trout, mountain whitefish, Rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	1325.1					1				No
Lake Fork River	Duchesne, Utah	Brook trout, brown trout, cutthroat trout, grayling, rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	1325.1					1				No
Sowers Creek	Duchesne, Utah	None	Boreal toad	1325.1					24				No
Minnie Maud Creek	Duchesne, Utah	Cutthroat trout	None	1325.2					0				No
Blackham Creek	Sevier, Utah	Cutthroat trout, rainbow trout	None	1330.1			1						No
Cottonwood Creek	Emery, Utah	None	Bluehead sucker	1330.1			1						No

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Ferron Creek	Emery, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	1330.1			1						No
Gooseberry Creek	Sevier, Utah	Brown trout, rainbow trout	Southern leatherside chub	1330.1			1						No
Ivie Creek	Millard, Utah	Brown trout, rainbow trout	None	1330.1			1						No
Lost Creek	Sevier, Utah	Brown trout, rainbow trout	Southern leatherside chub	1330.1			1						No
Meadow Creek	Sevier, Utah	Brown trout, cutthroat trout, rainbow trout	None	1330.1			1						No
Muddy Creek	Emery, Utah	None	Bluehead sucker, flannelmouth sucker, mountain sucker, southern leatherside chub	1330.1			1						No
Niotche Creek	Sevier, Utah	Cutthroat trout	None	1330.1			1						No
Pharo Creek	Millard, Utah	None	None	1330.1			1						No
Quitchupah Creek	Emery, Utah	None	Flannelmouth sucker, mountain sucker, southern leatherside chub	1330.1			0						No
Quitchupah Creek	Sevier, Utah	None	Flannelmouth sucker, mountain sucker, southern leatherside chub	1330.1			1						No
Saleratus Creek	Sevier, Utah	None	None	1330.1			1						No
Sevier River	Sevier, Utah	Black bullhead, channel catfish, green sunfish, smallmouth bass, walleye, yellow perch	Mountain sucker, southern leatherside chub	1330.1			0						No
Sevier River	Sevier, Utah	Black bullhead, channel catfish, green sunfish, smallmouth bass, walleye, yellow perch	Mountain sucker, southern leatherside chub	1330.1			1						No
Willow Creek	Millard, Utah	Cutthroat/rainbow trout hybrid, rainbow trout	None	1330.1			1						No
Yogo Creek	Sevier, Utah	Cutthroat trout, rainbow trout	None	1330.1			1						No
Birch Creek	Juab, Utah	None	Boreal toad	1340	0								No
Gardner Creek	Juab, Utah	None	None	1340	1								No
Salt Creek	Juab, Utah	Brown trout	None	1340	0								No
West Creek	Juab, Utah	None	None	1340	1								No
Sevier River	Juab, Utah	Black bullhead, channel catfish, green sunfish, smallmouth bass, walleye, yellow perch	Mountain sucker, southern leatherside chub	1370		1							No

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Sevier River	Millard, Utah	Black bullhead, channel catfish, green sunfish, smallmouth bass, walleye, yellow perch	Mountain sucker, southern leatherside chub	1380		1							No
Sevier River	Millard, Utah	Black bullhead, channel catfish, green sunfish, largemouth bass, smallmouth bass, walleye, white bass, white crappie, yellow perch	Mountain sucker, southern leatherside chub	1410			1						No
Number of Unnamed Perennials[2]	N/A	None	None	N/A	13	12	14	7	23	7	6	N/A	No

Stream Name	County, State	Game Fish	Special Status	Segment ID	Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Perennial Streams Within the Potential Disturbance Area Beyond the Refined Transmission Corridor													
Stinking Water Creek	Rio Blanco, Colorado	None	None	1210	X			X	X	X	X		No
Coal Creek	Carbon, Utah	None	None	1217.02				X					No
Minnie Maud Creek	Duchesne, Utah	Cutthroat trout	None	1217.02				X					No
Summit Creek	Carbon, Utah	None	None	1217.02				X					No
White River (tributary to Price River)	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1217.051					X				No
Willow Creek	Carbon, Utah	Brown trout	None	1217.051					X				No
Clear Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	1217.052					X	X			No
Mill Fork	Utah, Utah	None	None	1217.052					X	X			No
Dry Creek	Sanpete, Utah	None	None	1217.15				X					No
Minnie Maud Creek	Duchesne, Utah	Cutthroat trout	None	1218						X			No
Bear Creek	Utah, Utah	Not surveyed	Not surveyed	1219.5						X			No

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
White River (tributary to Price River)	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	1219.5						X			No
Bitter Creek	Garfield, Colorado	Brook trout, Colorado River cutthroat trout	Colorado River cutthroat trout	1220		X	X						No
Evacuation Creek	Rio Blanco, Colorado	None	None	1220		X	X						No
Spring Creek	Rio Blanco, Colorado	None	None	1220		X	X						No
Blue Slide Fork	Sanpete, Utah	None	None	1310		X							No
Cove Creek	Sanpete, Utah	None	None	1310		X							No
Dry Pole Fork	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	1310		X							No
Huntington Creek	Emery, Utah	Brown trout, Colorado River cutthroat trout (to be restocked)	Bluehead sucker, Colorado River cutthroat trout	1310		X							No
Lowry River	Emery, Utah	Colorado River cutthroat trout, tiger trout	Bluehead sucker, Colorado River cutthroat trout	1310		X							No
North Fork Coal Fork	Sanpete, Utah	None	None	1310		X							No
North Fork Pleasant Creek	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	1310		X							No
South Fork Coal Fork	Sanpete, Utah	None	None	1310		X							No
Hop Creek	Juab, Utah	Brown trout	Southern leatherside chub	1320.15	X				X	X	X		No
Currant Creek	Duchesne, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1322.23							X	X	Fruitland Micro-siting Options 2 and 3
Currant Creek	Duchesne, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1323.01	X							X	Fruitland Micro-siting Option 1
Currant Creek	Wasatch, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	1323.01	X							X	Fruitland Micro-siting Option 1
Lake Fork River	Duchesne, Utah	Brook trout, brown trout, cutthroat trout, grayling, rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	1321.01	X						X		

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.12								X	Fruitland Micro-siting Option 2
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.21							X		
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1322.71								X	Fruitland Micro-siting Option 3
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	1323.01	X							X	Fruitland Micro-siting Option 1
Strawberry River	Wasatch, Utah	Brook trout, brown trout, Colorado River cutthroat trout	Bluehead sucker, Colorado River cutthroat trout	1323.02	X						X		
Antelope Creek	Duchesne, Utah	None	None	1325.1					X				No
Duchesne River	Duchesne, Utah	Brown trout	Bluehead sucker, flannelmouth sucker, roundtail chub	1325.1					X				No
Little Creek	Sevier, Utah	Brown trout, rainbow trout	Southern leatherside chub	1330.1			X						No
Spring Creek	Sevier, Utah	None	None	1330.1			X						No
Trough Hollow Creek	Sevier, Utah	None	None	1330.1			X						No
Currant Creek and unamed tributary to Currant Creek	Juab, Utah	Brown trout	California floater, Columbia spotted frog, least chub, northern leopard frog	1340	X								No
Unnamed tributary to Birch Creek	Juab, Utah	None	Boreal toad	1340	X								No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

[3] Species occurs greater than 5 miles downstream of crossing. It is included in the analysis due to potential effects of water use during construction.

Sources: CPW 2012-2011; UDWR 2013-2010

Table G-7 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Perennial Waterbodies Crossed by Refined Transmission Corridor and 250-Foot ROW													
Box Elder Reservoir Number 3	Moffat, Colorado	Bluegill, largemouth bass, rainbow trout	None	1210	0			0	0	0	0		No
Horse Ridge Spring	Utah, Utah	None	None	1219.2								0	Reservation Ridge Alternative Variation
Pipe Spring	Duchesne, Utah	None	None	1219.6						0			Reservation Ridge Alternative Variation Comparison
Box Elder Reservoir	Moffat, Colorado	Bluegill, largemouth bass, rainbow trout	None	1220		0	0						No
Cactus Reservoir	Rio Blanco, Colorado	Bluegill, largemouth bass, rainbow trout	None	1220		0	0						No
Coyote Spring	Emery, Utah	None	None	1222.3		0							No
Pine Spring	Emery, Utah	None	None	1310		0							No
Bradley Springs	Juab, Utah	None	None	1320.2	0			0	0	0	0		No
Creepy Spring	Sevier, Utah	None	None	1330.1			0						No
D M A D Reservoir	Millard, Utah	Channel catfish, white bass	None	1410			1					1	No
Number of Unnamed Waterbodies[2]	N/A	None	None	N/A	4	0	0	0	4	1	3	N/A	No

Stream Name	County, State	Game Fish	Special Status	Segment ID	Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Perennial Waterbodies Within the Potential Disturbance Area Beyond the Refined Transmission Corridor													
Box Elder Reservoir Number 2	Moffat, Colorado	Bluegill, largemouth bass, rainbow trout	None	1210	X			X	X	X	X		No
Boreham, Lake	Duchesne, Utah	None	None	1325.1					X				No
Kyune Reservoir	Utah, Utah	None	None	1219.5						X			Reservation Ridge Alternative Variation Comparison
Millerton Reservoir	Carbon, Utah	Brown trout, cutthroat trout, rainbow trout	None	1223								X	Price Alternative Connector

Table G-7 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D	E	F	G		
Starvation Reservoir	Duchesne, Utah	Rainbow trout, smallmouth bass, walleye, yellow perch	None	1321	X						X		No
Boulger Reservoir	Sanpete, Utah	Rainbow trout, Yellowstone cutthroat trout	None	1217.15				X					No
Electric Lake	Emery, Utah	Tiger trout, Yellowstone cutthroat trout	None	1217.15				X					No
Huntington Reservoir	Emery, Utah	Brown trout, cutthroat trout, tiger trout	None	1310		X							No
Potters Ponds	Emery, Utah	Rainbow trout	None	1310		X							No
Saleratus Reservoir	Sevier, Utah	Largemouth bass	None	1330.1			X						No
Scipio Lake	Millard, Utah	Bluegill, catfish spp., crappies, largemouth bass, smallmouth bass, walleye	None	1330.1			X						No
Dog Valley Reservoir	Juab, Utah	None	None	1360	X			X	X	X	X		No
Josiah Springs	Sevier, Utah	None	None	1330.1			X						No
Mud Spring	Sevier, Utah	None	None	1330.1			X						No
Prowse Spring	Sevier, Utah	None	None	1330.1			X						No
Mud Spring	Sevier, Utah	None	None	1330.1			X						No
Bitter Seep	Emery, Utah	None	None	1225.2			X						No
Fishers Spring	Millard, Utah	None	None	1400								X	Lynndyl Alternative Connector
Elk Spring	Emery, Utah	None	None	1310		X							No
Coon Spring	Emery, Utah	None	None	1222.05		X							No
Good Water Spring	Emery, Utah	None	None	1222.05		X							No
Cottonwood Spring	Emery, Utah	None	None	1222.3		X							No
Goat Ranch Spring	Carbon, Utah	None	None	1223								X	Price Alternative Connector
Apple Tree Spring	Sanpete, Utah	None	None	1310		X							No
Tidwell Spring	Juab, Utah	None	None	1360	X			X	X	X	X		No
Horse Ridge Spring	Utah, Utah	None	None	1219.2									Reservation Ridge Alternative Variation
Cottonwood Spring	Utah, Utah	None	None	1320.15	X				X	X	X		No
Bradley Spring	Juab, Utah	None	None	1320.20	X			X	X	X	X		No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

Sources: CPW 2012-2011; UDWR 2013-2010

Table G-8 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region III Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D		
Perennial Streams Crossed by Refined Transmission Corridor and 250-Foot ROW										
Magotsu Creek	Washington, Utah	None	Arizona toad, bluehead sucker, flannelmouth sucker, roundtail chub, Virgin spinedace	1501.1	0					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Spring Creek	Washington, Utah	None	Virgin spinedace	1501.1	1					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Magotsu Creek	Washington, Utah	None	Arizona toad, bluehead sucker, flannelmouth sucker, roundtail chub, Virgin spinedace	1501.15	1					Ox Valley East & West Alternative Variations Comparisons
Moody Wash	Washington, Utah	None	Arizona toad, Virgin spinedace	1502.5	0					No
Shinbone Creek	Washington, Utah	None	None	1503					0	Ox Valley East Alternative Variation
Spring Creek	Washington, Utah	None	Virgin spinedace	1503					1	Ox Valley East Alternative Variation
Spring Creek	Washington, Utah	None	Virgin spinedace	1504					1	Ox Valley West Alternative Variation
Shinbone Creek	Washington, Utah	None	None	1505					0	Ox Valley East & West Alternative Variations
Pinto Creek	Iron, Utah	Rainbow trout	None	1506					1	Pinto Alternative Variation
Pinto Creek	Washington, Utah	Rainbow trout	None	1506					5	Pinto Alternative Variation
Santa Clara River	Washington, Utah	Brook trout, brown trout, green sunfish, rainbow trout	Arizona toad	1506					2	Pinto Alternative Variation
South Fork Pinto Creek	Washington, Utah	Rainbow trout	None	1506					2	Pinto Alternative Variation
Clover Creek	Lincoln, Nevada	Rainbow trout	Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace	1510		0		0		No
Mud Springs Wash	Lincoln, Nevada	None	None	1510		1		1		No
Meadow Valley Wash	Lincoln, Nevada	Rainbow trout	Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, Arizona toad	1520			0			No

Table G-8 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region III Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D		
Meadow Valley Wash	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, Arizona toad	1540.1		1		1		No
Muddy River	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, Moapa speckled dace, Moapa White River springfish, Virgin River chub	1540.2		1		1		No
Muddy River	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, Moapa speckled dace, Moapa White River springfish, Virgin River chub	1545					1	Arrowhead Alternative Connector
Muddy River	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, Moapa speckled dace, Moapa White River springfish, Virgin River chub	1550.1	1					No
Number of Unnamed Perennial Streams[2]	N/A	None	None	N/A	0	0	0	0	N/A	No
Stream Name	**County, State**	**Game Fish**	**Special Status**	**Segment ID**	**Crossings by Alternative[1]**				**Variation or Connector ROW Crossings[1]**	**Variation or Connector**
					A	**B**	**C**	**D**		
Perennial Streams Within the Potential Disturbance Area Beyond the Refined Transmission Corridor										
Little Pinto Creek	Iron, Utah	None	None	1506					X	Pinto Alternative Variation
Meadow Valley Wash	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley speckled dace, Arizona toad	1545					X	Arrowhead Alternative Connector

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

Sources: UDWR 2013-2010; NDOW 2011

Table G-9 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region III Corridors

Waterbody Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D		
Perennial Waterbodies Crossed by Refined Transmission Corridor and 250-Foot ROW										
Lower Big Wash Reservoir	Beaver, Utah	None	None	1480	0	0	0			No
Abe Spring	Washington, Utah	None	Arizona toad	1501.1	0					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Hamblin Spring	Washington, Utah	None	None	1501.1	0					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Hiway Spring	Washington, Utah	None	Arizona toad	1501.1	0					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Hyatt Spring	Washington, Utah	None	None	1501.1	0					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Lone Spring	Washington, Utah	None	None	1501.1	0					Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparisons
Rods Spring	Washington, Utah	None	None	1502.5	0					No
Cottonwood Spring	Washington, Utah	None	None	1503					0	Ox Valley East Alternative Variation
Rose Spring	Washington, Utah	None	None	1503					0	Ox Valley East Alternative Variation
Willow Spring	Washington, Utah	None	None	1503					0	Ox Valley East Alternative Variation
Bullrush Spring	Washington, Utah	None	None	1505					0	Ox Valley East & West Alternative Variations
Lafes Reservoir	Lincoln, Nevada	None	None	1510		0		0		No
Mud Springs	Lincoln, Nevada	None	None	1510		0		0		No
Shoemaker Spring	Lincoln, Nevada	None	None	1510		0		0		No

Table G-9 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region III Corridors

Waterbody Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D		
Topah Spring	Lincoln, Nevada	None	None	1510		0		0		No
Nelson Spring	Lincoln, Nevada	None	None	1520			0			No
Number of Unnamed Waterbodies[2]	N/A	None	None	N/A	0	0	0	0	N/A	No
Perennial Waterbodies Within the Potential Disturbance Area Beyond the Refined Transmission Corridor										
West Marshall Tract Reservoir	Millard, Utah	None	None	1460			X			No
West Clay Knoll Reservoir	Millard, Utah	None	None	1460			X			No
Smelter Knolls Reservoir	Millard, Utah	None	None	1470	X	X				No
Newcastle Reservoir	Iron, Utah	Rainbow trout, smallmouth bass, wiper	None	1500.05	X					Pinto Alternative Variation Comparison
Baker Reservoir	Washington, Utah	Brown trout, green sunfish, rainbow trout	None	1506					X	Pinto Alternative Variation
Jacks Canyon Reservoir	Lincoln, Nevada	None	None	1510		X		X		No
Rolling Hills Reservoir	Lincoln, Nevada	None	None	1510		X		X		No
Little Drum Spring	Millard, Utah	None	None	1470	X	X				No
Rock Spring	Iron, Utah	None	None	1500.02	X					No
Sand Spring	Iron, Utah	None	None	1500.02	X					No
Cole Spring	Washington, Utah	None	None	1502.5	X					No
Eightmile Spring	Washington, Utah	None	None	1502.5	X					No
Jackson Spring	Washington, Utah	None	None	1502.5	X					No
Cliff Spring	Washington, Utah	None	None	1503					X	Ox Valley East Alternative Variation
Joe Spring	Washington, Utah	None	None	1505					X	Ox Valley East & West Alternative Variations
Tom Spring	Washington, Utah	None	None	1505					X	Ox Valley East & West Alternative Variations
Fourmile Spring	Washington, Utah	None	None	1506					X	Pinto Alternative Variation
Mud Spring	Washington, Utah	None	None	1506					X	Pinto Alternative Variation
Nervine Spring	Washington, Utah	None	None	1506					X	Pinto Alternative Variation
Abe Spring	Lincoln, Nevada	None	None	1510	X			X		No

Table G-9 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region III Corridors

Waterbody Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]				Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C	D		
Acoma Spring	Lincoln, Nevada	None	None	1510		X		X		No
Sams Camp Spring	Lincoln, Nevada	None	None	1510		X		X		No
Summit Spring	Lincoln, Nevada	None	None	1510		X		X		No
Tule Spring	Lincoln, Nevada	None	None	1510		X		X		No
Buckboard Spring	Lincoln, Nevada	None	None	1520			X			No
Chokecherry Spring	Lincoln, Nevada	None	None	1520			X			No
Coyote Spring	Lincoln, Nevada	None	None	1520			X			No
Keel Spring	Lincoln, Nevada	None	None	1520			X			No
Miller Spring	Lincoln, Nevada	None	None	1520			X			No
Miser Spring	Lincoln, Nevada	None	None	1520			X			No
Oak Spring	Lincoln, Nevada	None	None	1520			X			No
West Oak Spring	Lincoln, Nevada	None	None	1520			X			No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

Sources: UDWR 2013-2010; NDOW 2011

Table G-10 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region IV Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]			Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C		
Perennial Streams Crossed by Refined Transmission Corridor and 250-Foot ROW									
Las Vegas Wash	Clark, Nevada	Largemouth bass	None	1660	1				No
Hemenway Wash	Clark, Nevada	None	None	1710		1	1		No
Boulder City Lateral	Clark, Nevada	None	None	1730				0	River Mountain Alternative Connector
Hemenway Wash	Clark, Nevada	None	None	1730				1	River Mountain Alternative Connector
Hemenway Wash	Clark, Nevada	None	None	1750		0	0		No
Hemenway Wash	Clark, Nevada	None	None	1760		1			No
Number of Unnamed Perennial Streams[2]	N/A	None	None	N/A	2	2	2	N/A	No
Stream Name	**County, State**	**Game Fish**	**Special Status**	**Segment ID**	**Crossings by Alternative[1]**			**Variation or Connector Crossings[1]**	**Variation or Connector**
					A	**B**	**C**		
Perennial Streams Within the Potential Disturbance Area Beyond the Refined Transmission Corridor									
Las Vegas Wash	Clark, Nevada	Largemouth bass	None	1670		X	X		No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

Sources: NDOW 2011

Table G-11 Game Fish and Special Status Aquatic Species in Waterbodies, Region IV Corridors

Waterbody Name	County, State	Game Fish	Special Status	Segment ID	ROW Crossings by Alternative[1]			Variation or Connector ROW Crossings[1]	Variation or Connector
					A	B	C		
Perennial Waterbodies Crossed by Refined Transmission Corridor and 250-Foot ROW									
Las Vegas Wash	Clark, Nevada	Largemouth bass	None	1660	0				No
Las Vegas Wash	Clark, Nevada	Largemouth bass	None	1660	0				No
Number of Unnamed Waterbodies[2]	N/A	None	None	N/A	0	0	0	N/A	No
Waterbody Name	**County, State**	**Game Fish**	**Special Status**	**Segment ID**	**Crossings by Alternative[1]**			**Variation or Connector Crossings[1]**	**Variation or Connector**
					A	**B**	**C**		
Perennial Waterbodies Within the Potential Disturbance Area Beyond the Refined Transmission Corridor									
Lake Mead Arm	Clark, Nevada	Bluegill, channel catfish, crappies, largemouth bass, striped bass	Razorback sucker	1670		X	X		No
Lake Mead Arm	Clark, Nevada	Bluegill, channel catfish, crappies, largemouth bass, striped bass	Razorback sucker	1710		X	X		No
Dry Lake Reservoir	Clark, Nevada	None	None	1771			X		No
C C C Reservoir	Clark, Nevada	None	None	1771			X		No
Gypsum Spring	Clark, Nevada	None	None	1630	X				No

[1] 0 = ROW does not cross waterbody, but it is located within the refined transmission corridor.

[2] Number of unnamed perennial streams crossed by the reference line.

Sources: NDOW 2011

Table G-12 USFS Species Considered in the Analysis for the TransWest Express Transmission Project

Common Name	Scientific Name	Status	Regional Forester's Sensitive Species and MIS by National Forest[1]					Species Excluded from Further Analysis due to Lack of Potential Habitat within Project Corridors[1,2]	Reason Species was Excluded from Further Analysis
			Utah						
			A	D	FL	ML	U		
AMPHIBIANS									
Boreal (western) toad	*Bufo boreas boreas*	FS	X	X	X	X	X	A: No (Sowers Creek) D: Yes FL: Yes ML: Yes U: No (Birch Creek drainage)	No suitable habitat is present within Project analysis corridors on the Dixie, Fishlake, and Manti-La Sal national forests.
Columbia spotted frog	*Rana luteiventris*	FS				X	X	Yes	No suitable habitat is present within Project analysis corridors for any of the five national forests.
FISH									
Bonneville cutthroat trout	*Oncorhynchus clarki utah*	FS, MIS		X	X	X	X	A: Yes D: Yes FL: Yes ML: Yes U: No (Tie Fork Creek)	No suitable habitat is present within the Project analysis corridors on the Dixie, Fishlake, and Manti-La Sal national forests.
Colorado River cutthroat trout	*Oncorhynchus clarki pleuriticus*	FS, MIS	X	X	X	X	X	A: Yes D: Yes FL: Yes ML: No (Dry Pole Creek, Huntington Creek, and Lowry River) U: No (Tabbyune Creek)	No suitable habitat is present within the Project analysis corridors on the Ashley, Dixie, and Fishlake national forests.
Southern leatherside chub	*Gila robusta robusta*	FS, MIS		X	X	X	X	D: Yes FL: No (Little Creek) ML: Yes U: No (Tie Fork Creek)	No suitable habitat is present within the Project analysis corridors on the Dixie and Manti-La Sal national forests.
Brook trout	*Salvelinus fontinalis*	MIS		X	X			D: No (Santa Clara River) FL: Yes	No suitable habitat is present within Project analysis corridors on the Fishlake National Forest.
Brown trout	*Salmo trutta*	MIS		X	X			D: No (Santa Clara River) FL: No (Little and Meadow creeks)	Not excluded.

Table G-12 USFS Species Considered in the Analysis for the TransWest Express Transmission Project

Common Name	Scientific Name	Status	Regional Forester's Sensitive Species and MIS by National Forest[1]					Species Excluded from Further Analysis due to Lack of Potential Habitat within Project Corridors[1,2]	Reason Species was Excluded from Further Analysis
			Utah						
			A	D	FL	ML	U		
Cutthroat trout	*Oncorhynchus clarki*	MIS	X	X	X			A: Yes D: Yes FL: No (Meadow and Niotche creeks)	No suitable habitat is present within Project corridors on the Ashley and Dixie national forests.
Lake trout	*Salvelinus namaycush*	MIS			X			Yes	No suitable habitat is present within Project corridors on the Fishlake National Forest.
Rainbow trout	*Oncorhynchus mykiss*	MIS		X	X			D: No (Pinto and South Fork Pinto creeks and Santa Clara River) FL: No (Meadow Creek)	Not excluded.
Virgin spinedace	*Lepidometa mollispinus mollispinus*	MIS		X				D: (Magotsu and Spring creeks)	Not excluded.
Macroinvertebrates	No specific species	MIS	X			X		No	Not excluded.

[1] A = Ashley, D = Dixie, FL = Fishlake, ML = Manti-La Sal, and U = Uinta Planning Area of the Uinta-Wasatch-Cache. Shaded occurrence indicates that suitable habitat is present within the Project analysis corridor on the National Forest.

[2] If a specific forest is not indicated, then the Yes or No decision applies to all the National Forests that have the species listed as sensitive.

Status: FS = Forest Sensitive, and MIS = Management Indicator Species.

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Region	County, State	Forest[2]	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector	Watershed (HUC10)	Subwatershed (HUC12)
						A	B	C	D	E	F	G				
Perennial Waterbodies Crossed by Refined Transmission Corridor and 250-Foot ROW																
Indian Creek	II	Utah, Utah	U	Not surveyed	1217.052					1	1			No	Soldier Creek	Upper Soldier Creek
Sheep Creek	II	Utah, Utah	U	None	1217.052					1	1			No	Soldier Creek	Lower Soldier Creek
Gooseberry Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	1217.15				1					No	Scofield Reservoir	Gooseberry Creek
Upper Huntington Creek	II	Emery, Utah	ML	Macroinvertebrates (MIS)	1217.15				1					No	Huntington Creek	Right Fork Huntington Creek
White Pine Fork	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	1217.15				1					No	Upper San Pitch River	Cottonwood Canyon-San Pitch River
Horse Ridge Spring	II	Utah, Utah	A	Macroinvertebrates (MIS)	1219.2								0	Reservation Ridge Alternative Variation	Avintaquin Creek	Mill Hollow-West Fork Avintaquin Creek
Tabbyune Creek	II	Utah, Utah	U	Colorado River cutthroat trout (FS & MIS)	1219.2								0	Reservation Ridge Alternative Variation	White River	Tabbyune Creek-White River
Tabbyune Creek	II	Wasatch, Utah	U	Colorado River cutthroat trout (FS & MIS)	1219.2								1	Reservation Ridge Alternative Variation	White River	Tabbyune Creek-White River
Indian Creek	II	Emery, Utah	ML	Macroinvertebrates (MIS)	1310		1							No	Cottonwood Creek	Indian Creek
Pine Spring	II	Emery, Utah	ML	Macroinvertebrates (MIS)	1310		0							No	Huntington Creek	Huntington Lake-Huntington Creek
Straight Fork Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	1310		0							No	Upper San Pitch River	Pleasant Creek
Sheep Creek	II	Utah, Utah	U	None	1325	1						1		No	Soldier Creek	Lower Soldier Creek
Tie Fork	II	Utah, Utah	U	Bonneville cutthroat trout (FS & MIS), southern leatherside chub (FS)	1325	1						1		No	Soldier Creek	Tie Fork
Sowers Creek	II	Duchesne, Utah	A	Boreal toad (FS), macroinvertebrates (MIS)	1325.1					14				No	Antelope Creek	Lance Canyon-Sowers Canyon
Sowers Creek	II	Duchesne, Utah	A	Boreal toad (FS), macroinvertebrates (MIS)	1325.1					10				No	Antelope Creek	Tabby Canyon-Sowers Canyon

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Region	County, State	Forest[2]	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector	Watershed (HUC10)	Subwatershed (HUC12)
						A	B	C	D	E	F	G				
Creepy Spring	II	Sevier, Utah	FL	None	1330.1			0						No	Salina Creek	Water Hollow-Salina Creek
Meadow Creek	II	Sevier, Utah	FL	Brown trout (MIS), cutthroat trout (MIS), rainbow trout (MIS)	1330.1			1					1	No	Salina Creek	Meadow Creek
Niotche Creek	II	Sevier, Utah	FL	Cutthroat trout (MIS)	1330.1			1						No	Salina Creek	Niotche Creek
Saleratus Creek	II	Sevier, Utah	FL	None	1330.1			1						No	Ivie Creek	Saleratus Creek
Abe Spring	III	Washington, Utah	D	None	1501.1	0								Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparison	Moody Wash	Magotsu Creek
Hamblin Spring	III	Washington, Utah	D	None	1501.1	0								Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparison	Shoal Creek	Holt Canyon
Hiway Spring	III	Washington, Utah	D	None	1501.1	0								Pinto Alternative Variation; Ox Valley East & West Alternative Variation	Moody Wash	Magotsu Creek
Hyatt Spring	III	Washington, Utah	D	None	1501.1	0								Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparison	Shoal Creek	Holt Canyon
Magotsu Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	1501.1	0								Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparison	Moody Wash	Magotsu Creek
Spring Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	1501.1	1								Pinto Alternative Variation; Ox Valley East & West Alternative Variations Comparison	Shoal Creek	Holt Canyon

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Region	County, State	Forest[2]	Special Status	Segment ID	ROW Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector	Watershed (HUC10)	Subwatershed (HUC12)
						A	B	C	D	E	F	G				
Magotsu Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	1501.15	1								Ox Valley East & West Alternative Variations Comparison	Moody Wash	Magotsu Creek
Cottonwood Spring	III	Washington, Utah	D	None	1503								0	Ox Valley East Alternative Variation	Shoal Creek	Lower Shoal Creek
Rose Spring	III	Washington, Utah	D	None	1503								0	Ox Valley East Alternative Variation	Shoal Creek	Lower Shoal Creek
Shinbone Creek	III	Washington, Utah	D	None	1503								0	Ox Valley East Alternative Variation	Shoal Creek	Calf Springs Creek
Spring Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	1503								1	Ox Valley East Alternative Variation	Shoal Creek	Calf Springs Creek
Twin Spring	III	Washington, Utah	D	None	1503								0	Ox Valley East Alternative Variation	Shoal Creek	Calf Springs Creek
Willow Spring	III	Washington, Utah	D	None	1503								0	Ox Valley East Alternative Variation	Shoal Creek	Calf Springs Creek
Spring Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	1504								1	Ox Valley West Alternative Variation	Shoal Creek	Calf Springs Creek
Bullrush Spring	III	Washington, Utah	D	None	1505								0	Ox Valley East & West Alternative Variation	Shoal Creek	Calf Springs Creek
Shinbone Creek	III	Washington, Utah	D	None	1505								0	Ox Valley East & West Alternative Variation	Shoal Creek	Calf Springs Creek
Pinto Creek	III	Washington, Utah	D	Rainbow trout (MIS)	1506								5	Pinto Alternative Variation	Escalante Valley-Pinto Creek	Pinto Creek
Santa Clara River	III	Washington, Utah	D	Brook trout (MIS), brown trout (MIS), rainbow trout (MIS)	1506								2	Pinto Alternative Variation	Upper Santa Clara River	Mahogany Creek-Santa Clara River
South Fork Pinto Creek	III	Washington, Utah	D	Rainbow trout (MIS)	1506								2	Pinto Alternative Variation	Escalante Valley-Pinto Creek	Pinto Creek

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Region	County, State	Forest[2]	Special Status	Segment ID	Crossings by Alternative[1]							Variation or Connector ROW Crossings[1]	Variation or Connector	Watershed (HUC10)	Subwatershed (HUC12)
						A	B	C	D	E	F	G				
Additional Perennial Waterbodies Within the Potential Disturbance Area Beyond the Refined Transmission Corridor																
Boulger Reservoir	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	1217.15				X					No	Huntington Creek	Right Fork Huntington Creek
Dry Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	1217.15				X					No	Upper San Pitch River	Dry Creek-San Pitch River
Electric Lake	II	Emery, Utah	ML	Macroinvertebrates (MIS)	1217.15				X					No	Huntington Creek	Right Fork Huntington Creek
Huntington Creek	II	Emery, Utah	ML	Colorado River cutthroat trout (FS & MIS), macroinvertebrates (MIS)	1217.15				X					No	Huntington Creek	Right Fork Huntington Creek
Horse Ridge Spring	II	Utah, Utah	A	Macroinvertebrates (MIS)	1219.2								X	Reservation Ridge Alternative Variation	Avintaquin Creek	Mill Hollow-West Fork Avintaquin Creek
Dry Pole Creek	II	Sanpete, Utah	ML	Bonneville cutthroat trout (FS & MIS), macroinvertebrates (MIS)	1310		X							No	Upper San Pitch River	Pleasant Creek
Lowry River	II	Emery, Utah	ML	Colorado River cutthroat trout (FS & MIS), macroinvertebrates (MIS)	1310		X							No	Cottonwood Creek	Lowry Water
North Fork Coal Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	1310		X							No	Upper San Pitch River	Pleasant Creek
Pine Spring	II	Emery, Utah	ML	Macroinvertebrates (MIS)	1310		X							No	Huntington Creek	Huntington Lake-Huntington Creek
Potters Pond	II	Emery, Utah	ML	Macroinvertebrates (MIS)	1310		X							No	Cottonwood Creek	Lowry Water
Josiah Springs	II	Sevier, Utah	FL	None	1330.1			X						No	Salina Creek	Soldier Canyon
Little Creek	II	Sevier, Utah	FL	Southern leatherside chub (FS), brown trout (MIS), rainbow trout (MIS)	1330.1			X						No	Salina Creek	Meadow Creek
Mud Spring	II	Sevier, Utah	FL	None	1330.1			X						No	Salina Creek	Soldier Canyon
Prowse Spring	II	Sevier, Utah	FL	None	1330.1			X						No	Salina Creek	Solier Canyon

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Saleratus Reservoir	II	Washington, Utah	FL	None	1330.1			X					No	Ivie Creek	Saleratus Creek
Birch Creek drainage	II	Juab, Utah	U	Boreal toad (FS)	1340	X							No	West Creek	West Creek-Current Creek
Fishers Spring	II	Millard, Utah	FL	None	1400							X	Lynndyl Alternative Connector	Ivie Creek	Scipio Valley-Devils Canyon
Cliff Spring	III	Washington, Utah	D	None	1503							X	Ox Valley East Alternative Variation	Shoal Creek	Lower Shoal Creek
Joe Spring	III	Washington, Utah	D	None	1505							X	Ox Valley East & West Alternative Variations	Shoal Creek	Calf Springs Creek
Tom Spring	III	Washington, Utah	D	None	1505							X	Ox Valley East & West Alternative Variations	Shoal Creek	Calf Springs Creek
Fourmile Spring	III	Washington, Utah	D	None	1506							X	Pinto Alternative Variation	Upper Santa Clara River	Mahogany Creek-Santa Clara River
Mud Spring	III	Washington, Utah	D	None	1506							X	Pinto Alternative Variation	Upper Santa Clara River	Mahogany Creek-Santa Clara River
Nervine Spring	III	Washington, Utah	D	None	1506							X	Pinto Alternative Variation	Upper Santa Clara River	Mahogany Creek-Santa Clara River

[1]Number of unnamed perennial waterbodies crossed by the reference line.

[2]A = Ashley National Forest; D = Dixie National Forest; FL = Fishlake National Forest; ML = Manti-La Sal National Forest; and U = Uinta National Forest.

FS = Forest Sensitive and MIS = Management Indicator Species.